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(EPA-R4-2015-003224)

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**FACT SHEET**

**APPLICATION FOR  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
PERMIT TO DISCHARGE WASTEWATER TO WATERS  
OF THE STATE OF MISSISSIPPI  
June 15, 2015**

Application No.: MS0036145

1. **SYNOPSIS OF APPLICATION**

a. **Name and Address of Applicant**

Starkville POTW  
101 Lampkin Street  
Starkville, Mississippi 39759

b. **Description of Applicant's Operation**

The collection and treatment of domestic wastewater

c. **Production Capacity of Facility**

10.0 MGD

d. **Description of Existing Pollution Abatement Facilities**

Biological treatment by oxidation ditch

e. **Applicant's Receiving Water**

Hollis Creek – See permit rationale

f. **Description of Discharges**

Outfall 001 is permitted to discharge a monthly average of 10.0 MGD of biologically treated wastewater.

2. **PROPOSED EFFLUENT LIMITATIONS**

See Draft Permit

3. MONITORING REQUIREMENTS

The applicant will be required to monitor regularly for flow and those parameters limited in Section 2 above with sufficient frequency to ensure compliance with the permit conditions. Frequency, methods of sampling, and reporting dates will be specified in the final permit.

4. PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS

Beginning the issuance date of this permit, the permittee shall achieve compliance with the effluent limitations specified in the draft permit.

5. PROPOSED CONDITIONS OF APPLICABILITY AND OTHER REQUIREMENTS

The applicant will be required at all times to operate facilities as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants.

The permittee shall provide an adequate operate staff which is duly qualified to carry out the operation, maintenance and testing functions required to insure compliance specified in the permit.

Maintenance of treatment facilities that result in degradation of effluent quality shall be scheduled during noncritical water quality period and shall be carried out in a manner approved by the Mississippi Office of Pollution Control.

The permittee is required to submit information of a periodic basis on the quality and quantity of effluent introduced into the facility by major contributing industries.

6. WATER QUALITY STANDARDS AND EFFLUENT STANDARDS APPLIED TO THE DISCHARGE

Receiving Stream is classified as Fish and Wildlife. Limitations were developed through empirical modeling.

7. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Mississippi Office of Pollution Control Permit Board proposes to issue an NPDES permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Interested persons are invited to submit written comments on the permit application or on the Permit Board's proposed determinations to the following address:

Mississippi Department of Environmental Quality  
Office of Pollution Control  
P. O. Box 2261  
Jackson, Mississippi 39225

Additional details about the application and the proposed determination, a sketch showing the location of the discharge, and a copy of the draft permit are available by writing Dmitriy Asanov at the Permit Board's address or calling 961-5171.

All comments received prior to the Public Notice end date will be considered in the formulation of final determinations with regard to this application.

b. Public Hearing

The Permit Board may hold a public hearing if there is a significant degree of public interest in a proposed permit or group of permits. Public notice of such a hearing will be circulated in newspapers in the geographical area of the discharge and to those on the agency's mailing list at least 30 days prior to the hearing.

Following the public hearing, the Permit Board may take such modifications in the terms and conditions of the proposed permits as may be appropriate and shall issue or deny the permit. Notice of issuance or denial will be circulated to those who participated in the hearing and to appropriate persons on the mailing list.

c. Issuance of the Permit When No Public Hearing is Held

If no public hearing is held, and, after review of the comments received, the Permit Board's determinations are substantially unchanged, the permit will be issued and become effective immediately.

If no public hearing is held, but there have been substantial changes, public notice of the Permit Board's revised determinations will be made. Following a 30-day comment period, the permit will be issued and become effective immediately, unless a public hearing is granted.

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99  
OMB Number 2040-004

FORM  
2A  
NPDES

## NPDES FORM 2A APPLICATION OVERVIEW

DEC 22 2014

MDEL

### APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

#### BASIC APPLICATION INFORMATION:

- A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. **Additional Application Information for Applicants with a Design Flow  $\geq$  0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. **Certification.** All applicants must complete Part C (Certification).

#### SUPPLEMENTAL APPLICATION INFORMATION:

- D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
  - 1. Has a design flow rate greater than or equal to 1 mgd,
  - 2. Is required to have a pretreatment program (or has one in place), or
  - 3. Is otherwise required by the permitting authority to provide the information.
- E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
  - 1. Has a design flow rate greater than or equal to 1 mgd,
  - 2. Is required to have a pretreatment program (or has one in place), or
  - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
  - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
  - 2. Any other industrial user that:
    - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
    - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
    - c. Is designated as an SIU by the control authority.
- G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

**ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)**

RECEIVED

DEC 22 2014

## FACILITY NAME AND PERMIT NUMBER:

Meridian POTW MS0020117

Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

## PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

## A.1. Facility Information.

Facility name Meridian Publicly Owned Treatment Works

Mailing Address Post Office Box 1430  
Meridian, MS 39302

Contact person Terry Cook, Jr.

Title Chief Utility Plant Operator, WWT

Telephone number (601) 485-1815 (Office); (601) 616-3328 (Cell)

Facility Address 2304 Highway 11 South  
(not P.O. Box) Meridian, MS 39307

## A.2. Applicant Information. If the applicant is different from the above, provide the following.

Applicant name Same as Above

Mailing Address \_\_\_\_\_

Contact person \_\_\_\_\_

Title \_\_\_\_\_

Telephone number \_\_\_\_\_

Is the applicant the owner or operator (or both) of the treatment works?

\_\_\_\_\_ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☒ facility \_\_\_\_\_ applicant

## A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES MS0020117 PSD \_\_\_\_\_

UIC \_\_\_\_\_ Other Sludge Permit #SW0350030431

RCRA \_\_\_\_\_ Other \_\_\_\_\_

## A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>City of Meridian</u>	<u>39,695</u>	<u>Separate</u>	<u>Municipal</u>
<u>Town of Marion</u>	<u>1,525</u>	<u>Separate</u>	<u>Municipal</u>
<u>Meridian NAS</u>	<u>4,040</u>	<u>Separate</u>	<u>U.S. Government</u>
<u>East MS Correctional Fac</u>	<u>1,075</u>	<u>Separate</u>	<u>State of MS</u>
<b>Total population served</b>	<u>46,355</u>		

## FACILITY NAME AND PERMIT NUMBER:

Meridian POTW MS0020117

Form Approved 1/14/99  
OMB Number: 2040-0086

## A.5. Indian Country.

a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate	Jan12 - Dec12 Two Years Ago	Jan13 - Dec13 Last Year	Jan14 - Oct14 This Year
13.0 mgd	6.72	7.28	5.65 mgd
b. Annual average daily flow rate	12.47 (AUG)	12.61 (MAY)	9.40 (FEB) mgd
c. Maximum daily flow rate			

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

<input checked="" type="checkbox"/> Separate sanitary sewer	425 miles	100 %
<input type="checkbox"/> Combined storm and sanitary sewer		%

## A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.?

☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent	1
ii. Discharges of untreated or partially treated effluent	0
iii. Combined sewer overflow points	0
iv. Constructed emergency overflows (prior to the headworks)	0
v. Other	N/A

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☒ Yes ☐ No

If yes, provide the following for each surface impoundment:

Location: Discharge into MS Power Co. Reservoir at EOF - 32deg 38' 43.62312" N, 88deg 45' 22.41884" W

Annual average daily volume discharged to surface impoundment(s) up to 13 mgd

Is discharge continuous or ☒ intermittent? 6 MGD on average

c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site: N/A

Location:

Number of acres:

Annual average daily volume applied to site: Mgd

Is land application continuous or ☐ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes ☒ No

## FACILITY NAME AND PERMIT NUMBER:

Meridian POTW MS0020117

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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

N/A

If transport is by a party other than the applicant, provide: N/A

Transporter name:

Mailing Address:

Contact person:

Title:

Telephone number:

For each treatment works that receives this discharge, provide the following: N/A

Name:

Mailing Address:

Contact person:

Title:

Telephone number:

If known, provide the NPDES permit number of the treatment works that receives this discharge:

Provide the average daily flow rate from the treatment works into the receiving facility.

mgd

- e Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

Yes

☒

No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method:

N/A

Is disposal through this method

continuous or

intermittent?

## FACILITY NAME AND PERMIT NUMBER:

Meridian POTW MS0020117

Form Approved 1/14/99  
OMB Number 2040-0086

## WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B. Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd.

## A.9. Description of Outfall.

- a. Outfall number 001
- b. Location Meridian 39307  
(City or town, if applicable) (Zip Code)  
lauderdale Mississippi  
(County) (State)  
88 deg, 44' 20" 32 deg, 20' 24"  
(Latitude) (Longitude)
- c. Distance from shore (if applicable) 0 ft.
- d. Depth below surface (if applicable) 0 ft.
- e. Average daily flow rate Jan 14 - Oct 14 5.65 mgd
- f. Does this outfall have either an intermittent or a periodic discharge?  
X Yes        No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: During scheduled and unscheduled outages at plant
- Average duration of each discharge: 2 weeks
- Average flow per discharge: Up to 13 mgd
- Months in which discharge occurs:
- g. Is outfall equipped with a diffuser?        Yes X No

## A.10. Description of Receiving Waters.

- a. Name of receiving water Sowashee Creek
- b. Name of watershed (if known) Lower Sowashee Creek Watershed
- United States Soil Conservation Service 14-digit watershed code (if known) 031700010503
- c. Name of State Management/River Basin (if known): Chunky River - Okatibee Creek
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known) 03170001
- d. Critical low flow of receiving stream (if applicable): N/A  
acute        cfs chronic        cfs
- e. Total hardness of receiving stream at critical low flow (if applicable):        mg/l of CaCO<sub>3</sub>

## FACILITY NAME AND PERMIT NUMBER:

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## A.11. Description of Treatment

- a. What levels of treatment are provided? Check all that apply.

☒ Primary ☒ Secondary (activated sludge 2 stages)  
☐ Advanced ☐ Other. Describe: Internal Outfall is for 101 outfall

- b. Indicate the following removal rates (as applicable):

East Meridian is 201

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal 85 %  
 Design SS removal 85 %  
 Design P removal        %  
 Design N removal        %

Other Parameters to be established on the basis of stream water quality of Sowashee Creek  
at the point of discharge.

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall?

☒ Yes ☐ No

- d. Does the treatment plant have post aeration?

Aeration in New Plant Chlorine Contact Chamber ☒ Yes ☐ No

**A.12. Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 101

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.2	s.u.	7.2	s.u.	11
pH (Maximum)	7.6	s.u.	7.2	s.u.	11
Flow Rate	5.99	mgd	4.23	mgd	11
Temperature (Winter)	20.6	deg C	19.9	deg C	3
Temperature (Summer)	27.3	deg C	24.7	deg C	3

\* For pH, please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc	Units	Conc	Units	Number of Samples		

## CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5						
	CBOD-5	3.0	mg/l	2.1	mg/l	10	5210B 0.1
FECAL COLIFORM		61	col/100ml	13	col/100ml	11	9222D 1e.c.
TOTAL SUSPENDED SOLIDS (TSS)		15.9	mg/l	6.2	mg/L	11	2540B 0.1

## END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM  
2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Meridian POTW MS0020117

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OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

### PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate  $\geq 0.1$  mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

**B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

6 MGD                      gpd During a heavy rainfall event, the I&I flow can double that rate.

Briefly explain any steps underway or planned to minimize inflow and infiltration.

\_\_\_\_\_

\_\_\_\_\_

**B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.) See attached map.

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

N/A c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

N/A f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

**B.3. Process Flow Diagram or Schematic.** Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g. chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram. See attached.

#### B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?        Yes   X   No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Responsibilities of Contractor: \_\_\_\_\_

**B.5. Scheduled Improvements and Schedules of Implementation.** Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

101 & 201

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

  X   Yes        No

## FACILITY NAME AND PERMIT NUMBER:

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OMB Number: 2040-0086

Meridian POTW MS002117

- c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).  
Upgrade to the process equipment is in progress and includes equipment for Process air and Sludge removal. Also to install a lift station (for more flow) to 201.
- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM/DD/YYYY	Actual Completion MM/DD/YYYY
- Begin construction	___/___/2015	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

No other dates are presently confirmed.

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☒ Yes ☐ No
- Describe briefly: \_\_\_\_\_

## B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 101

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc	Units	Conc	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	.4	mg/L	0.2	mg/L	11	4500NH3D	0.1
CHLORINE (TOTAL RESIDUAL TRC)	.64	mg/L	0.46	mg/L	11	4500CIG	0.1
DISSOLVED OXYGEN	8.7	mg/L	7.8	mg/L	11	4500G	0.1
TOTAL KJELDAHL NITROGEN (TKN)	2.21	mg/L	2.26	mg/L	4	4500NH3D-2011	0.5
NITRATE PLUS NITRITE NITROGEN	20.1	mg/L	16.0	mg/L	4	300.0	0.1
OIL and GREASE	nd	mg/L	nd	mg/L	4	1664A	1.6
PHOSPHORUS (Total)	2.25	mg/L	1.72	mg/L	4	4500PE-2011	0.125
TOTAL DISSOLVED SOLIDS (TDS)	317	mg/L	268	mg/L	4	2540C-2011	10
OTHER							

## END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

## FACILITY NAME AND PERMIT NUMBER.

Meridian POTW MS 0020117

Form Approved 1/14/99  
OMB Number 2040-0086

## A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☒

Primary

☒

Secondary

(activated sludge 2 stages)

☐ Advanced☐ Other. Describe:

Internal Outfall is for 101 outfall

- b. Indicate the following removal rates (as applicable):

East Meridian is 201

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal

85

%

Design SS removal

85

%

Design P removal

%

Design N removal

%

Other Parameters to be established on the basis of stream water quality of Sowashee Creek  
at the point of discharge.

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall?

☒

Yes

☐ No

- d. Does the treatment plant have post aeration?

☒

Yes

☐ No

Aeration in New Plant Chlorine Contact Chamber

**A.12. Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 201

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.1	s.u.	7.3	s.u.	11
pH (Maximum)	7.9	s.u.	7.3	s.u.	11
Flow Rate	.70	mgd	.48	mgd	11
Temperature (Winter)	16.0	deg C	15.9	deg C	2
Temperature (Summer)	27.1	deg C	24.5	deg C	2

\* For pH, please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

## CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5						
	CBOD-5	8.9	mg/l	4.5	mg/l	9	5210B
FECAL COLIFORM							
TOTAL SUSPENDED SOLIDS (TSS)		4.8	mg/L	2.5	mg/L	10	2540B

## END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

## FACILITY NAME AND PERMIT NUMBER:

Meridian POTW MS0020117

Form Approved 1/14/99  
OMB Number 2040-0096

## BASIC APPLICATION INFORMATION

## PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate  $\geq 0.1$  mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

6 MGD gpd During a heavy rainfall event, the I&amp;I flow can double that rate.

Briefly explain any steps underway or planned to minimize inflow and infiltration.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.) See attached map.

- a. The area surrounding the treatment plant, including all unit processes.
- b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

N/A c. Each well where wastewater from the treatment plant is injected underground.

- d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

- e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

N/A f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram. See attached.

## B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Responsibilities of Contractor: \_\_\_\_\_

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

001 &amp; 002, Internal outfalls 101 &amp; 201

- b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

☒ Yes ☐ No

## FACILITY NAME AND PERMIT NUMBER:

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Meridian POTW MS002117

- c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).  
Upgrade to the process equipment is in progress and includes equipment for Process air and Sludge removal. Also to install a lift station (for more flow) to 201.
- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM/DD/YYYY	Actual Completion MM/DD/YYYY
- Begin construction	___/___/2015	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

No other dates are presently confirmed.

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☒ Yes ☐ No

Describe briefly: \_\_\_\_\_  
\_\_\_\_\_

## B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 201

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc	Units	Conc	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	.60	mg/L	0.30	mg/L	10	4500NH3D	0.1
CHLORINE (TOTAL RESIDUAL, TRC)							
DISSOLVED OXYGEN	9.2	mg/L	8.0	mg/L	11	4500G	0.1
TOTAL KJELDAHL NITROGEN (TKN)	14.5	mg/L	7.74	mg/L	4	4500NH3D-2011	0.5
NITRATE PLUS NITRITE NITROGEN	16.9	mg/L	14.3	mg/L	4	300.0	0.1
OIL and GREASE	nd	mg/L	nd	mg/L	4	1664A	1.6
PHOSPHORUS (Total)	1.95	mg/L	1.37	mg/L	4	4500PE-2011	0.250
TOTAL DISSOLVED SOLIDS (TDS)	314	mg/L	279	mg/L	4	2540C-2011	10
OTHER							

## END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

## FACILITY NAME AND PERMIT NUMBER:

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Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

## PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☒ Part D (Expanded Effluent Testing Data) These Results To follow☒ Part E (Toxicity Testing: Biomonitoring Data) These Results to follow☒ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)

## ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title

Percy Bland, Mayor

Signature

P. BLO

Telephone number

601-485-1926

Date signed

12/16/14

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

Meridian POTW MS002117

## SUPPLEMENTAL APPLICATION INFORMATION

**All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.**

**GENERAL INFORMATION:**

**F.1. Pretreatment Program.** Does the treatment works have, or is it subject to, an approved pretreatment program?

X Yes No

**F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs):** Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 3

b. Number of CIUs. \_\_\_\_\_

**SIGNIFICANT INDUSTRIAL USER INFORMATION:**

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

**F.3. Significant Industrial User Information.** Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Waste Management, Inc. Kemper County Landfill

Mailing Address: 520 Murphy Road Post Office Box 846  
Meridian, MS 39301 Philadelphia, MS 39350

**F.4. Industrial Processes.** Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Runoff water from landfill leachate, sanitary waste, and storm water run-off.

**F.6. Principal Product(s) and Raw Material(s).** Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge

Principal product(s) Metals in run-off water

Raw material(s): \_\_\_\_\_

### F.6. Flow Rate.

a. **Process wastewater flow rate.** Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

64,000 gpd (continuous or X intermittent)

b. **Non-process wastewater flow rate.** Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

gpd (continuous or intermittent)

**F.7. Pretreatment Standards.** Indicate whether the SIU is subject to the following:

a. Local limits X Yes      No

b. Categorical pretreatment standards        Yes        No

If subject to categorical pretreatment standards, which category and subcategory?

## FACILITY NAME AND PERMIT NUMBER:

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## SUPPLEMENTAL APPLICATION INFORMATION

## PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

## GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

☒ Yes ☐ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 3b. Number of CIUs. 

## SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name Certaanteed Ceilings (Celotex)Mailing Address 2710 Hwy 11 SouthMeridian, MS 39307

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Company manufacturer of ceiling tiles

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s) Ceiling tilesRaw material(s) Pearlite, paper mineral wool

## F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

90,000 gpd (☐ continuous or ☐ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

 gpd (☐ continuous or ☒ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ☒ Yes ☐ Nob. Categorical pretreatment standards ☐ Yes ☐ No

If subject to categorical pretreatment standards, which category and subcategory?

## FACILITY NAME AND PERMIT NUMBER

Meridian POTW MS002117

Form Approved 1/14/99  
OMB Number 2040-0086

**F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upset, interference) at the treatment works in the past three years?

☐ Yes ☒ No

If yes, describe each episode.

**RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:**

**F.9. RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?  
☐ Yes ☒ No (go to F.12)

**F.10. Waste Transport.** Method by which RCRA waste is received (check all that apply):

☐ Truck☐ Rail☐ Dedicated Pipe

**F.11. Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number

Amount

Units

**CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:**

**F.12. Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.)☒ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

**F.13. Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA or other remedial waste originates (or is expected to originate in the next five years).

**F.14. Pollutants.** List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

**F.15. Waste Treatment:**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous☐ Intermittent

If intermittent, describe discharge schedule.

**END OF PART F.****REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

## FACILITY NAME AND PERMIT NUMBER:

Meridian POTW MS002117

Form Approved 1/14/99  
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## SUPPLEMENTAL APPLICATION INFORMATION

## PART G. COMBINED SEWER SYSTEMS Not Applicable

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

## CSO OUTFALLS

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

- Outfall number \_\_\_\_\_
- Location \_\_\_\_\_  
(City or town, if applicable) (Zip Code) \_\_\_\_\_  
(County) (State) \_\_\_\_\_  
(Latitude) (Longitude) \_\_\_\_\_
- Distance from shore (if applicable) \_\_\_\_\_ ft.
- Depth below surface (if applicable) \_\_\_\_\_ ft.
- Which of the following were monitored during the last year for this CSO?  
\_\_\_\_ Rainfall \_\_\_\_ CSO pollutant concentrations \_\_\_\_ CSO frequency  
\_\_\_\_ CSO flow volume \_\_\_\_ Receiving water quality
- How many storm events were monitored during the last year? \_\_\_\_\_

G.4. CSO Events.

- Give the number of CSO events in the last year.  
\_\_\_\_\_ events (\_\_\_\_ actual or \_\_\_\_ approx.)
- Give the average duration per CSO event.  
\_\_\_\_\_ hours (\_\_\_\_ actual or \_\_\_\_ approx.)

**FACILITY NAME AND PERMIT NUMBER:**

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c. Give the average volume per CSO event.

\_\_\_\_\_ million gallons (\_\_\_\_\_ actual or \_\_\_\_\_ approx.)

d. Give the minimum rainfall that caused a CSO event in the last year.

\_\_\_\_\_ inches of rainfall

**G.5. Description of Receiving Waters.**

a. Name of receiving water: \_\_\_\_\_

b. Name of watershed/river/stream system: \_\_\_\_\_

United States Soil Conservation Service 14-digit watershed code (if known): \_\_\_\_\_

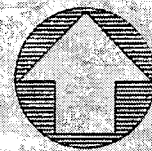
c. Name of State Management/River Basin: \_\_\_\_\_

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): \_\_\_\_\_

**G.6. CSO Operations.**

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard)

**END OF PART G.****REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.**



MPC PLANT RESERVOIR

EAST LAUDERDALE SUB-STATION

City of Marion

City of Meridian

MERIDIAN EAST WWTP

MERIDIAN MAIN WWTP

MERIDIAN EAST WWTP  
EFFLUENT DISCHARGE POINT 001

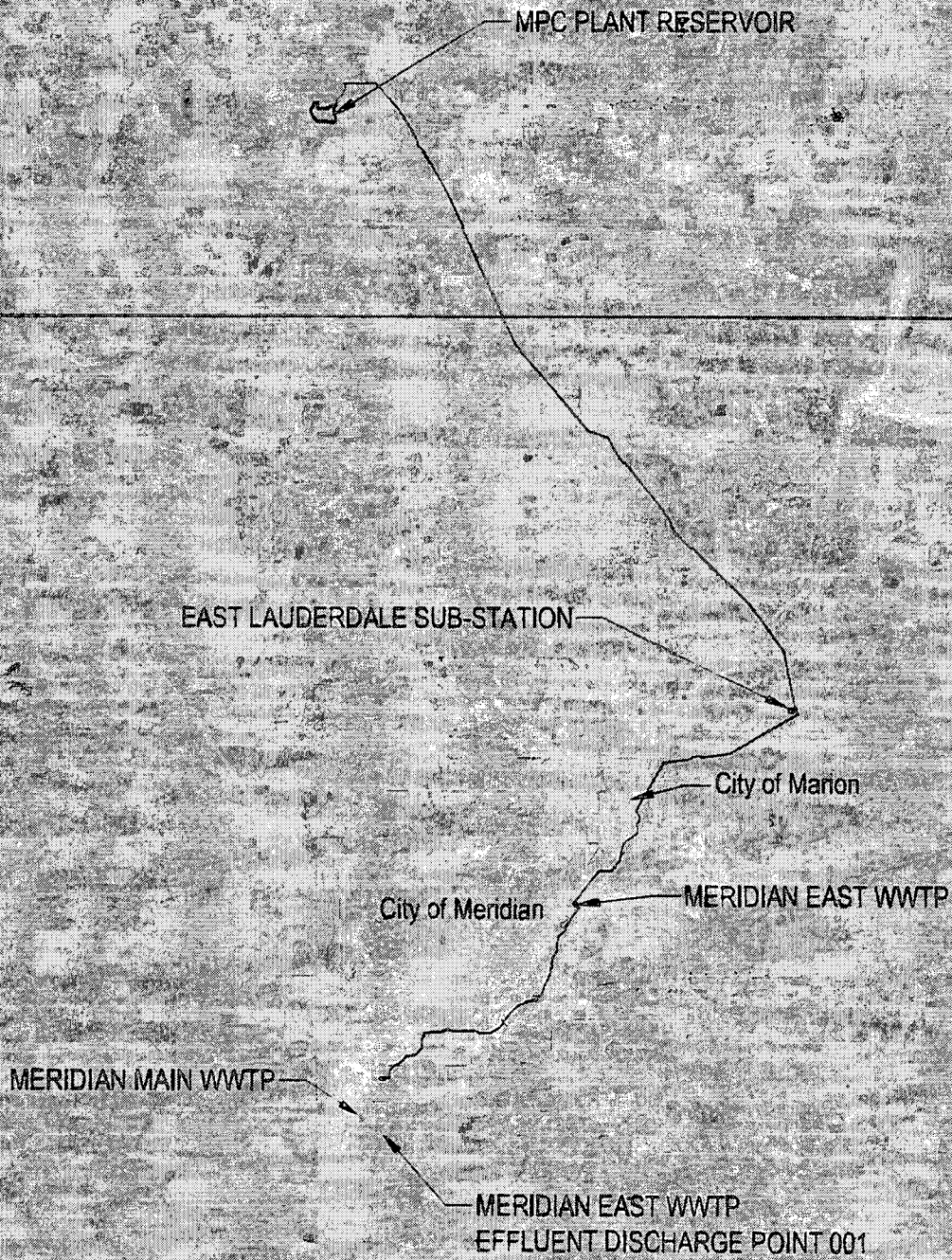
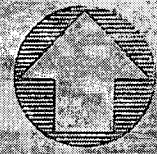
**LOCATION MAP**

SCALE: 1"=20,000'



Pickering Firm, Inc.  
"Water Supply", "Civil Engineering", "Surveying",  
"Transportation", "Natural & Marine Resources"  
2001 Airport Road, Suite 200  
Farmingdale, NY 11735  
631-246-3600





**LOCATION MAP**

SCALE: 1"=20,000'



**Pickering**

Pickering Firm, Inc.  
14000 Corporate Center Drive  
Dallas, Texas 75244  
(214) 343-1000  
FAX (214) 343-1001  
WWW.PICKERING.COM



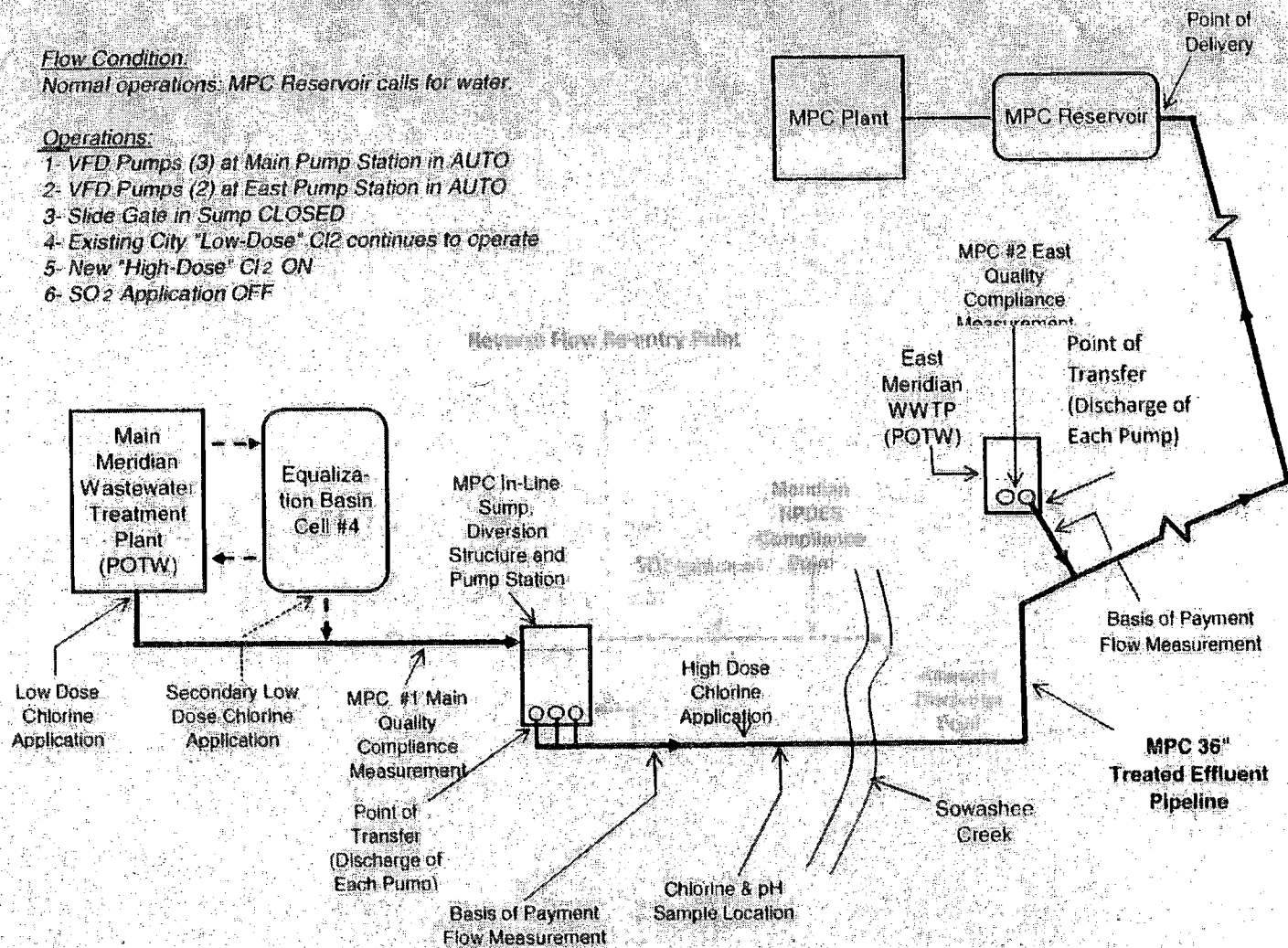
## ATTACHMENT B - NORMAL FLOW OPERATIONS

### Flow Condition:

Normal operations: MPC Reservoir calls for water.

### Operations:

- 1- VFD Pumps (3) at Main Pump Station in AUTO
- 2- VFD Pumps (2) at East Pump Station in AUTO
- 3- Slide Gate in Sump CLOSED
- 4- Existing City "Low-Dose" Cl<sub>2</sub> continues to operate
- 5- New "High-Dose" Cl<sub>2</sub> ON
- 6- SO<sub>2</sub> Application OFF



Note: "Subdued" items are not applicable to this flow condition.

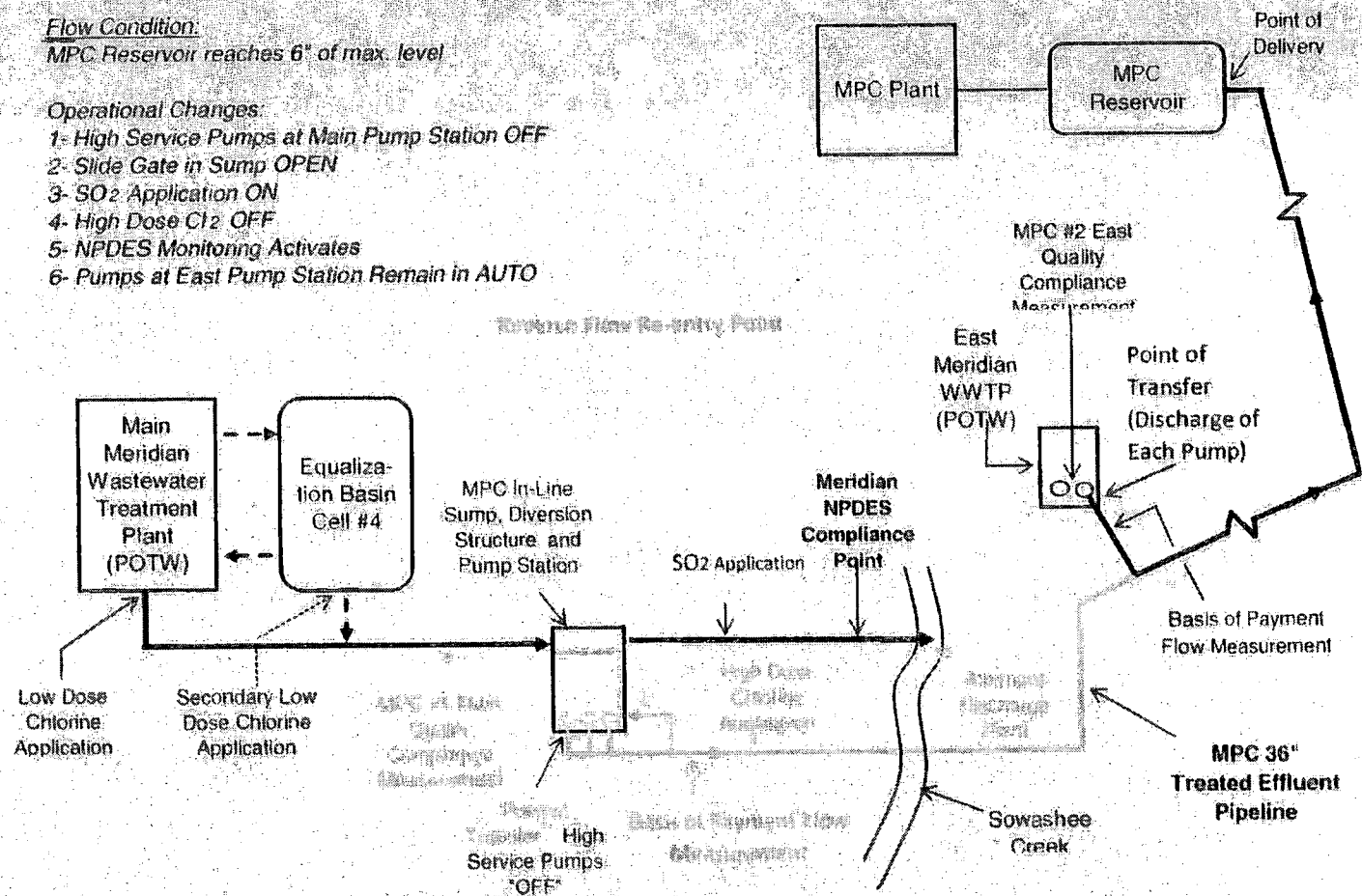
## ATTACHMENT C - INTERIM OPERATIONS FLOW CONDITIONS

### Flow Condition:

MPC Reservoir reaches 6" of max. level

### Operational Changes:

- 1- High Service Pumps at Main Pump Station OFF
- 2- Slide Gate in Sump OPEN
- 3- SO<sub>2</sub> Application ON
- 4- High Dose Cl<sub>2</sub> OFF
- 5- NPDES Monitoring Activates
- 6- Pumps at East Pump Station Remain in AUTO



Note: "Subdued" items are not applicable to this flow condition.

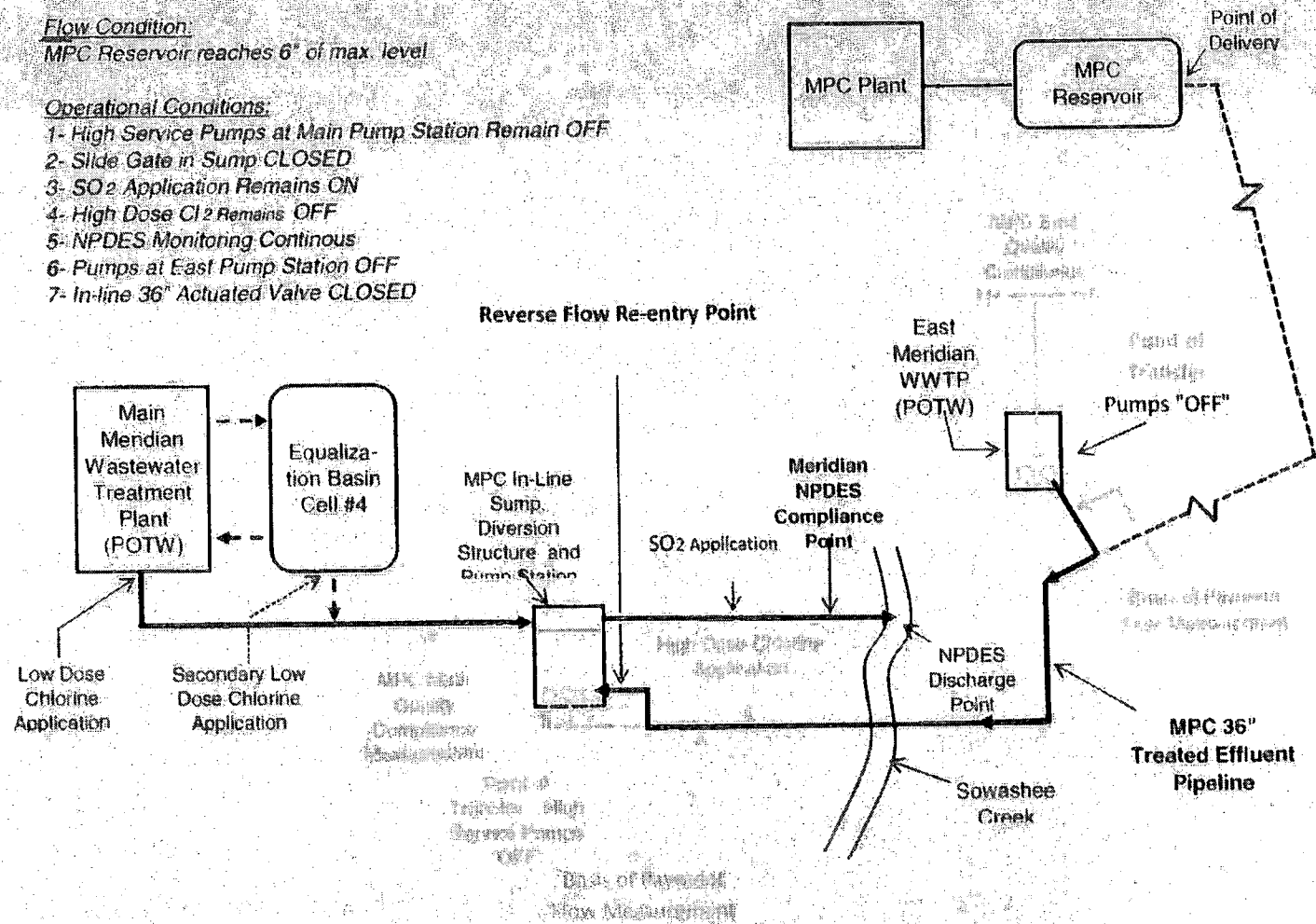
## ATTACHMENT D - REVERSE FLOW OPERATIONS

### Flow Condition:

MPC Reservoir reaches 6" of max. level

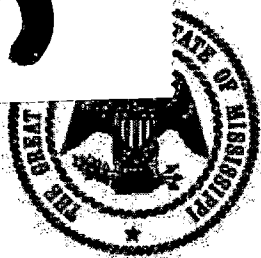
### Operational Conditions:

- 1- High Service Pumps at Main Pump Station Remain OFF
- 2- Slide Gate in Sump CLOSED
- 3- SO<sub>2</sub> Application Remains ON
- 4- High Dose Cl<sub>2</sub> Remains OFF
- 5- NPDES Monitoring Continuous
- 6- Pumps at East Pump Station OFF
- 7- In-line 36" Actuated Valve CLOSED



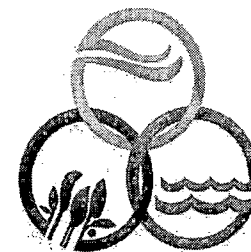
Note: "Subdued" items are not applicable to this flow condition.

3



## State of Mississippi

### WATER POLLUTION CONTROL PERMIT



Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

#### **THIS CERTIFIES**

Meridian POTW

311 27th Avenue

Meridian, MS

Lauderdale County

has been granted permission to discharge wastewater in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit. This permit is issued in accordance with the provisions of the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402(b) of the Federal Water Pollution Control Act.

**Mississippi Environmental Quality Permit Board**

---

**Mississippi Department of Environmental Quality**

Issued/Modified:

Expires:

Permit No. MS0020117

Agency Interest # 13261

\*\*\* Draft Permit \*\*\*

---

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Other Relevant Documents:	
Cover Letter, Lab Data, Form 2A	

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Meridian POTW

Subject Item Inventory

Permit Number:MS0020117

Activity ID No.: PER20140002

**Subject Item Inventory:**

ID	Designation	Description
AI13261	MS0020117	Municipality
RPNT2	MS0020117-101	Outfall 101 (Internal Outfall from Meridian POTW)
RPNT3	MS0020117-201	Outfall 201 (Internal Outfall from East Meridian POTW)
RPNT4	MS0020117-002	Outfall 002 (Combined Domestic / Municipal Wastewater Effluent from Outfall 101 and 201)

**Receiving Stream Relationships:**

Subject Item	Relationship	Receiving Stream
RPNT4 Outfall 002 (Combined Domestic / Municipal Wastewater Effluent from Outfall 101 and 201)	Discharges Into	Sowashee Creek

**KEY**

ACT = Activity

AREA = Area

CONT = Control Device

IA = Insignificant Activity

MAFO = Animal Feeding Operation

RPNT = Release Point

WDPT = Withdrawal Point

AI = Agency Interest

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

IMPD = Impoundment

PCS = PCS

TRMT = Treatment

\*\*\* Draft Permit \*\*\*

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item: Outfall 101 (Internal Outfall from Meridian POTW)**

**RPNT0000000002: MS0020117-101**

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Ammonia Nitrogen, Total (as N) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	2 Monthly Average	3 Maximum Weekly Average	mg/L	Daily	24-hr Composite	Dec-Apr
<i>Ammonia Nitrogen, Total (as N) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	1 Monthly Average	1.5 Maximum Weekly Average	mg/L	Daily	24-hr Composite	May-Nov
<i>Ammonia Nitrogen, Total (as N) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Daily	24-hr Composite	Jan-Dec
<i>Chlorine, total residual Effluent</i>	*****	*****	*****	0.3 Minimum	*****	*****	mg/L	Daily	Grab Sampling	Jan-Dec
<i>Flow Effluent</i>	13.0 Monthly Average	Report Maximum Weekly Average	Million Gallons per Day	*****	*****	*****	*****	Daily	Continuous Recorder	Jan-Dec
<i>Nitrogen (Total) Effluent</i>	*****	*****	*****	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Monthly	24-hr Composite	Jan-Dec
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	10 Monthly Average	15 Maximum Weekly Average	mg/L	Daily	24-hr Composite	Dec-Apr
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	7 Monthly Average	10.5 Maximum Weekly Average	mg/L	Daily	24-hr Composite	May-Nov

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item: Outfall 101 (Internal Outfall from Meridian POTW)**

**RPNT0000000002: MS0020117-101**

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Daily	24-hr Composite	Jan-Dec
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Percent Removal</i>	*****	*****	*****	85 Minimum	*****	*****	%	Monthly	Calculations	Jan-Dec
<i>Oxygen, dissolved In Aeration Unit</i>	*****	*****	*****	Report Minimum	*****	Report Maximum	mg/L	Daily	Grab Sampling	Jan-Dec
<i>pH Effluent</i>	*****	*****	*****	Report Minimum	*****	Report Maximum	SU	Daily	Grab Sampling	Jan-Dec
<i>Phosphorus (Total) Effluent</i>	*****	*****	*****	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Monthly	24-hr Composite	Jan-Dec
<i>Sludge Settleability 30 Minute In Aeration Unit</i>	*****	*****	*****	Report Minimum	*****	Report Maximum	ml/L	Daily	Measurement	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	30 Monthly Average	45 Maximum Weekly Average	mg/L	Daily	24-hr Composite	Jan-Dec
<i>Solids (Total Suspended) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Daily	24-hr Composite	Jan-Dec

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item:**    **Outfall 101 (Internal Outfall from Meridian POTW)**

**RPNT0000000002:    MS0020117-101**

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Solids (Total Suspended) Percent Removal</i>	*****	*****	*****	85 Minimum	*****	*****	%	Monthly	Calculations	Jan-Dec

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item:    Outfall 201 (Internal Outfall from East Meridian POTW)**

**RPNT0000000003:    MS0020117-201**

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Ammonia Nitrogen, Total (as N) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	2 Monthly Average	3 Maximum Weekly Average	mg/L	Daily	8-hr Composite	Dec-Apr
<i>Ammonia Nitrogen, Total (as N) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	1 Monthly Average	1.5 Maximum Weekly Average	mg/L	Daily	8-hr Composite	May-Nov
<i>Ammonia Nitrogen, Total (as N) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Daily	8-hr Composite	Jan-Dec
<i>Flow Effluent</i>	1.0 Monthly Average	Report Maximum Weekly Average	Million Gallons per Day	*****	*****	*****	*****	Daily	Calculations	Jan-Dec
<i>Nitrogen (Total) Effluent</i>	*****	*****	*****	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Monthly	8-hr Composite	Jan-Dec
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	7 Monthly Average	10.5 Maximum Weekly Average	mg/L	Daily	8-hr Composite	May-Nov
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	10 Monthly Average	15 Maximum Weekly Average	mg/L	Daily	8-hr Composite	Dec-Apr
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Daily	8-hr Composite	Jan-Dec

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item:**    **Outfall 201 (Internal Outfall from East Meridian POTW)**

**RPNT0000000003:    MS0020117-201**

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Percent Removal</i>	*****	*****	*****	85 Minimum	*****	*****	%	Monthly	Calculations	Jan-Dec
<i>Oxygen, dissolved In Aeration Unit</i>	*****	*****	*****	Report Minimum	*****	Report Maximum	mg/L	Daily	Grab Sampling	Jan-Dec
<i>pH Effluent</i>	*****	*****	*****	Report Minimum	*****	Report Maximum	SU	Daily	Grab Sampling	Jan-Dec
<i>Phosphorus (Total) Effluent</i>	*****	*****	*****	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Monthly	8-hr Composite	Jan-Dec
<i>Sludge Settleability 30 Minute In Aeration Unit</i>	*****	*****	*****	Report Minimum	*****	Report Maximum	ml/L	Daily	Measurement	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	30 Monthly Average	45 Maximum Weekly Average	mg/L	Daily	8-hr Composite	Jan-Dec
<i>Solids (Total Suspended) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Daily	8-hr Composite	Jan-Dec
<i>Solids (Total Suspended) Percent Removal</i>	*****	*****	*****	85 Minimum	*****	*****	%	Monthly	Calculations	Jan-Dec

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item: Outfall 002 (Combined Domestic / Municipal Wastewater Effluent from Outfall 101 and 201)**

**RPNT0000000004: MS0020117-002**

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Ammonia Nitrogen, Total (as N) Effluent</i>	217 Monthly Average	325 Maximum Weekly Average	pounds per day	*****	*****	*****	*****	Daily	Calculations	Dec-Apr
<i>Ammonia Nitrogen, Total (as N) Effluent</i>	108 Monthly Average	163 Maximum Weekly Average	pounds per day	*****	*****	*****	*****	Daily	Calculations	May-Nov
<i>Chlorine, total residual Effluent</i>	*****	*****	*****	*****	0.011 Monthly Average	0.019 Maximum Weekly Average	mg/L	Daily	Grab Sampling	Jan-Dec
<i>Copper (Total Recoverable) Effluent</i>	*****	*****	*****	*****	0.0052 Monthly Average	0.0072 Maximum Weekly Average	mg/L	Monthly	Calculations	Jan-Dec
<i>Fecal coliform, general Effluent</i>	*****	*****	*****	*****	200 Monthly Average	400 Maximum Weekly Average	# of colonies/100 ml	Daily	Grab Sampling	Jan-Dec
<i>Flow Effluent</i>	13 Monthly Average	Report Maximum Weekly Average	Million Gallons per Day	*****	*****	*****	*****	Daily	Continuous Recorder	Jan-Dec
<i>Nitrogen (Total) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	*****	*****	*****	Monthly	Calculations	Jan-Dec
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Effluent</i>	1084 Monthly Average	1627 Maximum Weekly Average	pounds per day	*****	*****	*****	*****	Daily	Calculations	Dec-Apr

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item:** Outfall 002 (Combined Domestic / Municipal Wastewater Effluent from Outfall 101 and 201)

**RPNT0000000004:** MS0020117-002

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Effluent</i>	759 Monthly Average	1138 Maximum Weekly Average	pounds per day	*****	*****	*****	*****	Daily	Calculations	May-Nov
<i>Oxygen, dissolved Effluent</i>	*****	*****	*****	6.0 Minimum	*****	*****	mg/L	Daily	Grab Sampling	Jan-Dec
<i>pH Effluent</i>	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	Daily	Grab Sampling	Jan-Dec
<i>Phosphorus (Total) Effluent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	*****	*****	*****	Monthly	Calculations	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	3253 Monthly Average	4879 Maximum Weekly Average	pounds per day	*****	*****	*****	*****	Daily	Calculations	Jan-Dec

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**AI0000013261 (MS0020117) Municipality:**

### Limitation Requirements:

Condition No.	Parameter	Condition
L-1		<p>Samples taken in compliance with the monitoring requirements specified in this permit shall be taken:</p> <p>For Outfall 001 samples shall be taken at the nearest accessible point after final treatment by Meridian POTW but prior to mixing with the receiving stream.</p> <p>For Outfall 002 samples shall be taken at the nearest accessible point after final treatment of the combined effluents from 101 and 201 but prior to mixing with the receiving stream.</p> <p>For Outfall 101 samples shall be taken at the nearest accessible point after final treatment by Meridian POTW but prior to mixing with the receiving stream.</p> <p>For Outfall 201 samples shall be taken at the nearest accessible point after final treatment by East Meridian POTW but prior to mixing with the effluent from Outfall 101. [WPC-1 Chapter One Section IV.A(28)]</p>
L-2		<p>The combined effluent discharge from Outfall 101 and Outfall 201 shall not total over 13 million gallons per day (Monthly Average). [40 CFR]</p>
L-3		<p>The discharge of wastewater by the equalization basin into Outfall 001 or Outfall 101 will be considered a bypass of the wastewater treatment system, and is subject to the conditions of bypassing as addressed in Permit Conditions T-30 through T-34. [40 CFR]</p>
L-4		<p>There shall be no discharge of floating solids or visible foam in other than trace amounts. [11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).]</p>
L-5		<p>The effluent shall not cause an accumulation of solids or sewage sludges in the receiving stream. [11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).]</p>
L-6		<p>The discharges shall not cause the occurrence of a visible sheen on the surface of the receiving waters. [11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).]</p>

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### Limitation Requirements:

Condition No.	Parameter	Condition
L-7		Samples taken in compliance with the monitoring requirements specified in this permit shall be taken at the nearest accessible point after final treatment but prior to mixing with the receiving stream or as otherwise specified in this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28).]

### Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		<p>Chronic Whole Effluent Toxicity Monitoring Requirements</p> <p>The Water Quality Standards of Mississippi require that all waters be free from substances in concentrations or combinations which are harmful to human, animals, or aquatic life (State of Mississippi, Water Quality Criteria for intrastate and Coastal Waters, Section II.4., Minimum Conditions Applicable to All Waters, page 3, adopted March 22, 1990). In accordance with such requirements, the permittee is authorized to discharge from outfall 101 and 201 only in accordance with the following conditions:</p> <p>(1) The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.</p> <p>(2) The permittee shall perform 7-day chronic, static renewal, definitive (a control and five effluent concentrations) WET tests in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, (EPA/600/4-89/001) or Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028) or the most recent edition*. [11 Miss. Admin. Code Pt. 6, R. 1.2.6]</p>

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**AI0000013261 (continued):**

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-2		<p>Chronic Whole Effluent Toxicity Monitoring Requirements- continued</p> <p>(2)(i) Dilution water used for these tests shall consist of reagent grade water, defined as distilled or deionized water that does not contain substances which are toxic to the test organisms. For freshwater tests, dilution water shall consist of reagent grade chemicals or mineral water combined to make moderately hard dilution water according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/600/4-89/001) or most recent edition*. For estuarine testing, dilution water shall consist of synthetic seawater or hypersaline brine combined to achieve a salinity of 20 parts per thousand according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms (EPA/600/4-87/028) or most recent edition*. These dilution waters will be deemed acceptable if the control organisms in the toxicity tests meet the minimum EPA criteria for chronic tests. [11 Miss. Admin. Code Pt. 6, R. 1.2.6.]</p>
M-3		<p>Chronic Whole Effluent Toxicity Monitoring Requirements- continued</p> <p>(2)(ii) If the Mississippi Office of Pollution Control determines the receiving waters are freshwater, the permittee shall conduct a Ceriodaphnia dubia Survival and Reproduction Test, and Pimephales promelas Larval Survival and Growth Test on serial dilutions of effluent to determine if the discharge from the outfall(s) 101 and 201 is chronically toxic. Such testing will determine if the water affects the survival, growth, and reproduction of the test organisms. Static renewal tests will be conducted on three 24-hour composite samples of effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/600/4-89/001), or the most recent edition*, are met. All data shall be statistically analyzed according to the referenced manual. [11 Miss. Admin. Code Pt. 6, R. 1.2.6]</p>

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**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-4		<p>Chronic Whole Effluent Toxicity Monitoring Requirements- continued</p> <p>(2)(iii) If the Mississippi Office of Pollution Control determines that the receiving water is estuarine, the permittee shall conduct a <i>Menidia beryllina</i> Larval survival and Growth Test and a <i>Mysidopsis bahia</i> Survival, Growth, and Fecundity Test on serial dilutions of effluent to determine if the discharge from outfall ^ is chronically toxic. Such testing will determine if the water affects the survival, growth, and fecundity of the test organisms. Static renewal tests will be conducted on three 24-hour composite samples of the effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028) or most recent edition* are met. All test data shall be statistically analyzed according to the referenced manual. [11 Miss. Admin. Code Pt. 6, R. 1.2.6.]</p>
M-5		<p>Chronic Whole Effluent Toxicity Monitoring Requirements- continued</p> <p>(2)(iv) A standard reference toxicant quality assurance test (chronic) shall be conducted concurrently with the effluent tests using both species used in the toxicity tests. Alternatively, if a lab conducts monthly QA/QC reference toxicant tests with both species as part of their SOP, these results may be submitted in lieu of the above mentioned concurrent tests results. In either case, the reference toxicant test results must be submitted with the final report as well as on the Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form within two weeks of test completion. Final chronic toxicity test results shall be in report form as outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition*. [11 Miss. Admin. Code Pt. 6, R. 1.2.6.]</p>

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### Monitoring Requirements:

Condition No.	Parameter	Condition
M-6		Chronic Whole Effluent Toxicity Monitoring Requirements- continued  (3) These chronic toxicity tests shall be initiated within 90 days of the date of issuance of the permit to evaluate wastewater toxicity. Such chronic toxicity tests shall be conducted once per quarter for a period of one year following the effective date of the permit. Sampling shall be times to cover the season extremes of the year (hot-dry and cold-wet). In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.61 (06-03-93). *Contact the Mississippi Office of Pollution Control Laboratory for information on most recent edition(s) of methods manual. [11 Miss. Admin. Code Pt. 6, R. 1.2.6.]

### Record-Keeping Requirements:

Condition No.	Condition
R-1	Recording of Results  For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all information obtained from such monitoring including:  (1) The exact place, date, and time of sampling; (2) The dates the analyses were performed; (3) The person(s) who performed the analyses; (4) The analytical techniques, procedures or methods used; and (5) The results of all required analyses. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(a).]

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**Submittal/Action Requirements:**

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Condition

No.            Condition

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S-1            Sludge Management Requirements.

- (1) General Compliance: The permittee shall comply with all existing Federal and State laws and regulations that apply to its sewage sludge use and disposal practice(s), with the Mississippi Nonhazardous Waste Management Regulations and with the CWA Section 405(d) technical standards when promulgated.
- (2) Reopener: If an applicable "acceptable management practice" or numerical limitation for pollutants in sewage sludge promulgated under Section 405(d)(2) of the Clean Water Act, as amended by the Water Quality Act of 1987, is more stringent than the sludge pollutant limit or acceptable management practice in this permit, or controls a pollutant to conform to the requirements promulgated under Section 405(d)(2). The permittee shall comply with the limitations by no later than the compliance deadline specified in the applicable regulations as required by Section 405(d)(2)(D) of the Clean Water Act.
- (3) Notice of Change in Sludge Disposal Practice: The permittee shall give prior notice to the Director of any change(s) planned in the permittee's sludge use or disposal practice.
- (4) Cause for Modification: 40 CFR 122.62(a)(1) provides that the following is a cause for modification but not revocation and reissuance of permits except when the permittee requests or agrees.
- (5) Alterations: There are material and substantial changes or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]

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**Submittal/Action Requirements:**

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Condition

No.            Condition

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S-2            Pretreatment Requirements.

(1) This permit shall be modified, or alternately revoked and reissued by a date to be determined to incorporate and approved municipal pretreatment program as required under Section 402(b)(8) of the Federal Water Pollution Control Act and implementing regulations or by the requirements of the approved State pretreatment program, as appropriate.

(2) Effluent limitations from this discharge are listed in the Effluent Limitations section of this permit. If it becomes apparent that other pollutants attributable to inputs from major contributing industries using the municipal system are also present in the permittee's discharge, this permit may be revised to specify effluent limitations for any or all of such other pollutants in accordance with best practicable technology or water quality standards.

(3) Under no circumstances shall the permittee allow introduction of the following wastes or pollutants into the waste treatment system.

(a) Pollutants which create a fire or explosion hazard in the treatment works;

(b) Pollutants which will cause corrosive structural damage to treatment works; but in no case discharges with a pH designed lower than 5.0, unless the works are specifically designed to accomodate such discharges;

(c) Solids or viscous substances in amounts which cause obstructions to the flow in sewer or interference with the proper operation of the treatment works;

(d) Wastewaters at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so as to cause a loss of treatment efficiency;

(e) Heat in amounts which will inhibit biological activity in the treatment works resulting in interference, but in no case heat in such quantities that the temperature of the influent exceeds 40 degrees Celsius (104 degrees Fahrenheit), unless approval for alternate limits has been granted by the Permit Board. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]

S-3            Reporting Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) POSTMARKED NO LATER THAN THE 28TH DAY OF THE MONTH FOLLOWING THE COMPLETED REPORTING PERIOD. As an alternative to submitting a paper DMR the permittee may submit using the eDMR system no later than the 28th day of the month following the completed reported period. Copies of these, and all other reports required herein, shall be signed in accordance with 11 Miss. Admin. Code Pt. 6, R. 1. 1. 4. A(15)(c)(1). of the Mississippi Wastewater Permit Regulations, and shall be submitted to the Mississippi Environmental Quality Permit Board at the following address: Mississippi Department of Environmental Quality Office of Pollution Control P.O. Box 2261 Jackson, Mississippi 39225. [11 Miss. Admin. Code Pt. 6, R. 1. 1. 4. A(15)(c)(1).]

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S-4	<p>Noncompliance Notification - Twenty-Four Hour Reporting</p> <p>(1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and/or prevent recurrence of the noncompliance.</p> <p>(2) The following shall be included as information which must be reported within 24 hours under this paragraph.</p> <p>(i) Any unanticipated bypass which exceeds any effluent limitation in the permit.</p> <p>(ii) Any upset which exceeds any effluent limitation in the permit.</p> <p>(iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Permit Board in the permit to be reported within 24 hours.</p> <p>(iv) The Executive Director may waive the written report on a case-by-case basis for reports under paragraph (1) of this section if the oral report has been received within 24 hours. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(e).]</p>
S-5	<p>Noncompliance Notification - Other Noncompliance</p> <p>The permittee shall report all instances of noncompliance not reported under the twenty-four hour reporting requirements, at the time monitoring reports are submitted or within 30 days from the end of the month in which the noncompliance occurs. The reports shall contain the same information as is required under the twenty-four hour reporting requirements contained in this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(f).]</p>
S-6	<p>Noncompliance Notification - Other Information</p> <p>Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permit Board, it shall promptly submit such facts or information. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(g).]</p>

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**Submittal/Action Requirements:**

Condition No.	Condition
S-7	Expiration of Permit  At least 180 days prior to the expiration date of this permit pursuant to the State law and regulation, the permittee who wishes to continue to operate under this permit shall submit an application to the Permit Board for reissuance. The Permit Board may grant permission to submit an application later than this, but no later than the expiration date of the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.5.B(1).]
S-8	The IC25 result of the Whole Effluent Toxicity (WET) Testing of the effluent as the chronic value shall be greater than or equal to 97% and shall be monitored as described in Conditions No. M - 1 through M - 6 (pages 3 - 6) of the permit. Chronic bioassay evaluation shall be initiated within 90 days of the date of issuance of the permit and shall be conducted once per quarter for outfall 101 and 201 for two quarters. Additional information regarding this monitoring is found in Conditions M - 1 through M - 6 of this permit. Monitoring results shall be compiled and submitted to Mississippi Quality Board POSTMARKED NO LATER THAN THE 28TH DAY OF DECEMBER 2015. Permit may be reopened based on the results of WET Testing. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]

**Narrative Requirements:**

**Definitions:**

Condition No.	Condition
T-1	Definitions: General  The permittee shall refer to 11 Miss. Admin. Code Pt. 6, R. 1.1.1.A for definitions of any permit term not specified in this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A.]
T-2	Definitions: Monthly Average  "Monthly Average" means the average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during the month. The monthly average for fecal coliform bacteria is the geometric mean of "daily discharges" measured during the calendar month. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(44).]

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## Narrative Requirements:

### Definitions:

Condition No.	Condition
T-3	<p>Definitions: Daily Discharge</p> <p>"Daily discharge" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily average" is calculated as the average measurement of the discharge of the pollutant over the day. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(15).]</p>
T-4	<p>Definitions: Daily Maximum</p> <p>"Daily maximum" means the highest "daily discharge" over a calendar month. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(16).]</p>
T-5	<p>Definitions: Maximum Weekly Average</p> <p>Maximum Weekly Average means the highest "weekly average" over a monitoring period. [40 CFR 122]</p>
T-6	<p>Definitions: Toxic Pollutants</p> <p>"Toxic pollutants" means any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices", any pollutant identified in regulations implementing Section 405(d) of the Clean Water Act. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(71).]</p>
T-7	<p>Definitions: Hazardous Substances</p> <p>"Hazardous substances" are defined in 40 CFR 116.4. [40 CFR 116.4]</p>
T-8	<p>Definitions: Quarterly Average</p> <p>"Quarterly Average" means the average of "daily discharges" over a three month period, calculated as the sum of all "daily discharges" measured during the quarter divided by the number of "daily discharges" measured during the quarter. The quarterly average for fecal coliform bacteria is the geometric mean of "daily discharges" measured during the quarter. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(61).]</p>

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### Narrative Requirements:

#### Definitions:

Condition No.	Condition
T-9	<p>Definitions: Weekly Average</p> <p>"Weekly average" means the average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. The weekly average for fecal coliform bacteria is the geometric mean of all "daily discharges" measured in a calendar week. In computing the geometric mean for fecal coliform bacteria, one (1) shall be substituted for sample results of zero. For self-monitoring purposes, the value to be reported is the single highest weekly average computed during a calendar month. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(86).]</p>
T-10	<p>Definitions: Quarterly Maximum</p> <p>"Quarterly Maximum" means the highest "daily discharge" measured over a three-month period. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(62).]</p>
T-11	<p>Definitions: Maximum Monthly Average</p> <p>Maximum Monthly Average means the highest "monthly average" over a monitoring period. [40 CFR 122]</p>
T-12	<p>Definitions: Yearly Average</p> <p>"Yearly Average" means the average of "daily discharges" over a calendar year, calculated as the sum of all "daily discharges" measured during the calendar year divided by the number of "daily discharges" measured during the calendar year. The yearly average for fecal coliform bacteria is the geometric mean of "daily discharges" during the calendar year. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(87).]</p>
T-13	<p>Definitions: Yearly Maximum</p> <p>"Yearly Maximum" means the highest "daily discharge" measured over a calendar year. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(88).]</p>
T-14	<p>Definitions: "Submitted" means the document is postmarked on or before the applicable deadline, except as otherwise specified. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(67).]</p>

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Condition No.	Condition
T-15	<p>The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule:</p> <p>Upon permit issuance. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1. Section IV.A(9)]</p>
T-16	<p>Reopener Clause</p> <p>This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation or storm water regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation or regulation so issued or approved:</p> <ol style="list-style-type: none"><li>1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or</li><li>2. Controls any pollutant not limited in the permit; or</li><li>3. This permit shall be modified to reflect any additional or otherwise more stringent limitations and additional monitoring as determined to be necessary by the results of a Completed TMDL. [WPC-1 Chapter One Section IV.F(1)]</li></ol>
T-17	<p>Effluent limitations and monitoring requirements for Outfalls 002, 101, 201 as listed in this permit will only be applicable when the treated effluent from that outfall is ultimately discharged into Sowashee Creek. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]</p>
T-18	<p>The facility shall record and make available upon request the durations of all discharges of treated wastewater from Outfall 002. [WPC-1 Chapter One]</p>
T-19	<p>The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule: Upon Permit Issuance. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(9).]</p>
T-20	<p>No later than 10 days following the date of compliance specified by this permit, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(10).]</p>

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**Narrative Requirements:**

Condition No.	Condition
T-21	<p><b>Change in Discharge</b></p> <p>All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions or treatment modifications which result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application. If such changes will not violate the effluent limitations to the Mississippi Environmental Quality Permit Board, the permit may be modified to specify and limit any pollutants not previously limited. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.]</p>
T-22	<p><b>Adverse Impacts</b></p> <p>The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(19).]</p>
T-23	<p>The permittee shall provide written notification to the Mississippi Commission on Environmental Quality no later than thirty (30) days after the loss of the permittee's certified operator. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]</p>
T-24	<p><b>Representative Sampling</b></p> <p>Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored wastewater. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28)(e).]</p>
T-25	<p><b>Reporting</b></p> <p>If the results for a given sample analysis are such that any parameter (other than fecal coliform) is not detected at or above the minimum level for the test method used, a value of zero will be used for that sample in calculating an arithmetic mean value for the parameter. If the resulting calculated arithmetic mean value for that reporting period is zero, the permittee shall report "NODI = B" on the DMR. For fecal coliform, a value of 1.0 shall be used in calculating the geometric mean. If the resulting fecal coliform mean value is 1.0, the permittee shall report "NODI = B" on the DMR. For each quantitative sample value that is not detectable, the test method used and the minimum level for that method for that parameter shall be attached to and submitted with the DMR. The permittee shall then be considered in compliance with the appropriate effluent limitation and/or reporting requirement. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 2.]</p>

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**Narrative Requirements:**

Condition No.	Condition
T-26	<p>Reporting</p> <p>If the permittee monitors any pollutant as prescribed in the permit more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Permit Board. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(2).]</p>
T-27	<p>Reporting</p> <p>Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Permit Board in the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(3).]</p>
T-28	<p>Test Procedures</p> <p>Test procedures for the analysis of pollutants shall include those set forth in 40 CFR 136 or alternative procedures approved and/or promulgated by EPA. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(30).]</p>
T-29	<p>Records Retention</p> <p>All records and results of monitoring activities required by this permit, including calibration and maintenance records, shall be retained by the permittee for a minimum of three (3) years, unless otherwise required or extended by the Permit Board, copies of which shall be furnished to the Department upon request. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(a).]</p>
T-30	<p>Falsifying Reports</p> <p>Any permittee who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required by the Permit Board to be maintained as a condition in a permit, or who alters or falsifies the results obtained by such devices or methods and/or any written report required by or in response to a permit condition, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for a violation of a permit condition pursuant to Section 49-17-43 of the Code. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(d).]</p>

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Condition No.	Condition
T-31	<p>Duty to Comply</p> <p>The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(2).]</p>
T-32	<p>Proper Operation, Maintenance and Replacement</p> <p>The permittee shall at all times properly operate, maintain, and when necessary, promptly replace all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. Proper replacement includes maintaining an adequate inventory of replacement equipment and parts for prompt replacement when necessary to maintain continuous collection and treatment of wastewater. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(18).]</p>
T-33	<p>Duty to Mitigate</p> <p>The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(19).]</p>
T-34	<p>Bypassing</p> <p>The permittee shall comply with the terms and conditions regarding bypass found in 40 CFR 122.41(m). [40 CFR 122.41(m)]</p>

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T-35            Bypassing - Definitions

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. [40 CFR 122.41(m)]

T-36            Bypassing - Bypass not exceeding limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the notice and prohibition provisions of the bypass requirements in this permit. [40 CFR 122.41(m)]

T-37            Bypassing -Notice

Anticipated bypass-

If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

Unanticipated bypass-

The permittee shall submit notice of an unanticipated bypass as required by the twenty-four hour reporting requirements set forth in this permit. [40 CFR 122.41(m)]

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### Narrative Requirements:

Condition No.	Condition
T-38	<p>Bypassing- Prohibition of Bypass</p> <p>(1) Bypass is prohibited, and the Commission may take enforcement action against a permittee unless:</p> <p>(i) Bypass was unavoidable to prevent loss of life, personal injury, or sever property damage.</p> <p>(ii) There was no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and</p> <p>(iii) The permittee submitted notices as required under the Twenty-Four Hour reporting requirements set forth in this permit.</p> <p>(2) The Commission may approve an anticipated bypass, after considering its adverse affects, if the Commission determines that it will meet the three conditions listed above in paragraph (1) of this permit condition. [40 CFR 122.41(m)]</p>
T-39	<p>Upsets</p> <p>The permittee shall meet the conditions of 40 CFR 122.41(n) regarding "Upsets" and as in the upset requirements of this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).]</p>
T-40	<p>Upsets- Definition</p> <p>"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).]</p>
T-41	<p>Upsets - Effect of an Upset</p> <p>An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the "conditions necessary for demonstration of upset" requirements of this permit are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, shall not constitute final administrative action subject to judicial review. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(27).]</p>

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Condition No.	Condition
T-42	<p>Upsets - Conditions necessary for demonstration of upset</p> <p>A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:</p> <ul style="list-style-type: none"><li>(1) An upset occurred and that the permittee can identify the cause(s) of the upset;</li><li>(2) The permitted facility was at the time being properly operated;</li><li>(3) The permittee submitted notice of the upset as required in 40 CFR 122.41(L)(6)(ii)(B)(24-hour notice of noncompliance); and</li><li>(4) The permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate). [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).]</li></ul>
T-43	<p>Upsets - Burden of proof</p> <p>In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).]</p>
T-44	<p>Removed Substances</p> <p>Solids, sludges, filter backwash, or other residuals removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent such materials from entering State waters and in a manner consistent with the Mississippi Solid Waste Disposal Act, the Federal Resource Conservation and Recovery Act, and the Mississippi Water Pollution Control Act. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(21).]</p>
T-45	<p>Power Failures</p> <p>If electric power is required, in order to maintain compliance with the conditions and prohibitions of the permit, the permittee shall either:</p> <ul style="list-style-type: none"><li>(1) Provide an alternative power source to operate the wastewater control facilities; or, if such alternative power source is not in existence, and no date for its implementation appears in the permit,</li><li>(2) Halt, reduce, or otherwise control production and/or all wastewater flows upon reduction, loss, or failure of the primary source of power to the wastewater control facilities. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(22).]</li></ul>

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T-46      Inspection and Entry

The permittee shall allow any authorized Commission representative to enter the permittee's premises at any reasonable time, to have access to and copy any applicable records, to inspect process facilities, treatment works, monitoring methods or equipment or to take samples, as authorized by Section 49-17-21 of the Code. In the event of investigation during an emergency response action, a reasonable time shall be any time of the day or night. Follow-up investigations subsequent to the conclusion of the emergency event shall be conducted at reasonable times. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(17).]

T-47      Transfer of Ownership or Control

This permit is not transferable to any person without proper modification of this permit following procedures found in [11 Miss. Admin. Code Pt. 6, R. 1.1.5.C.]

T-48      Signatory Requirements

All applications, reports, or information submitted to the Permit Board shall be signed and certified. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]

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Condition No.	Condition
T-49	<p>Signatory Requirements - Application Signatures</p> <p>All permit applications shall be signed as follows:</p> <p>(1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (i) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making function for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.</p> <p>(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or</p> <p>(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]</p>
T-50	<p>Signatory Requirements - Reports and Other Information</p> <p>All reports required by the permit and other information requested by the Permit Board shall be signed by a person described by the application signature requirements in this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:</p> <p>(1) The authorization is made in writing by a person described by the application signature requirements;</p> <p>(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and</p> <p>(3) The written authorization is submitted to the Permit Board. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]</p>

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### Narrative Requirements:

Condition No.	Condition
T-51	<p>Signatory Requirements - Changes to Authorization</p> <p>If an authorization under the signatory requirements of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the signatory requirements of this permit must be submitted to the Permit Board prior to or together with any reports, information, or applications. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]</p>
T-52	<p>Signatory Requirements - Certification</p> <p>Any person signing a document under the signatory requirements stated in this permit shall make the following certification:</p> <p>"I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]</p>
T-53	<p>Availability of Records</p> <p>Except for information deemed to be confidential under the Mississippi Code Ann. 49-17-39 and 40 CFR 123.41, file information relating to this permit shall be made available for public inspection and copying during normal business hours at the office of the Department of Environmental Quality in Jackson, Mississippi. Written request must be provided in accordance with policies developed by the Commission and must state, specifically, records proposed for review, date proposed for review and copying requirements. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.E.]</p>
T-54	<p>Duty to Provide Information</p> <p>The permittee shall furnish to the Permit Board within a reasonable time any relevant information which the Permit Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. The permittee shall also furnish to the Permit Board upon request, copies of records required to be kept by the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(16).]</p>

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T-55	<p>Toxic Pollutants</p> <p>The permittee shall comply with any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) established under Section 307(a) of the Federal Water Pollution Control Act. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(26).]</p>
T-56	<p>Toxic Pollutants Notification Requirements</p> <p>The permittee shall comply with the applicable provisions of 40 CFR 122.42. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(26).]</p>
T-57	<p>Civil and Criminal Liability</p> <p>(1) Any person who violates a term, condition or schedule of compliance contained within this permit or the Mississippi Water Pollution Control Law is subject to the actions defined by law.</p> <p>(2) Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.</p> <p>(3) It shall not be the defense of the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(24).]</p>
T-58	<p>Oil and Hazardous Substance Liability</p> <p>Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Federal Water Pollution Control Act and applicable provisions under Mississippi Law pertaining to transportation, storage, treatment, or spillage of oil or hazardous substances. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(23).]</p>
T-59	<p>Property Rights</p> <p>The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations. [11 Miss. Admin. Code Pt. 6, R. 1.1.5. E.]</p>

# Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW  
Facility Requirements  
Permit Number:MS0020117  
Activity ID No.: PER20140002

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AI0000013261 (continued):

## Narrative Requirements:

Condition No.	Condition
T-60	<p>Severability</p> <p>The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(25).]</p>
T-61	<p>Protection of Confidential Information</p> <p>(1) Pursuant to Miss. Code Ann. ' 49-17-39 and 40 CFR 123.41, the Permit Board shall make available to the public all information contained on any form and all public comments on such information. Effluent data and information concerning air or water quality shall also be made available to the public. Information that is determined by the Commission to be trade secrets shall not be disclosed to the public without prior consent of the source of such information. When a claim of confidentiality is made by a person in accordance with the provisions of Miss. Code Ann. ' 49-17-39, a recommendation on the questions of confidentiality shall be made by the Commission and forwarded to the Regional Administrator (or his/her designee) of EPA for his concurrence in such determination of confidentiality. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.F.]</p>
T-62	<p>Protection of Confidential Information- continued</p> <p>(2) A copy of a State, UIC, or NPDES permit application, public notice, fact sheet, draft permit and other forms relating thereto, including written public comment and other reports, files and information relating to the application not classified as confidential information by the Commission pursuant to part (1) of this requirement, shall be available for public inspection and copying during normal business hours at the office of the Department in Jackson, Mississippi. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.F.]</p>
T-63	<p>Protection of Confidential Information- continued</p> <p>(3) Upon determination by the Commission that information submitted by a permit applicant is entitled to protection against disclosure as trade secrets, the information shall be so labeled and otherwise handled as confidential. Copies of the information and a notice of the Commission's action shall be forwarded to the Regional Administrator (or his/her designee). In making its determination of entitlement to protection as a trade secret, the Commission shall follow the procedure set forth in Miss. Code Ann. ' 49-17-39. In the event the Commission denies the claim of confidentiality, the applicant shall have, upon notification thereof, the right to appeal the Commission's determination in the same manner provided for other orders of the Commission. No disclosure, except to EPA, shall be allowed until any appeal from the determination of the Commission is completed. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.F.]</p>

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Meridian POTW  
Facility Requirements  
Permit Number MS0020117  
Activity ID No.: PER20140002

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**AI0000013261 (continued):**

**Narrative Requirements:**

Condition No.	Condition
T-64	<p>Spill Prevention and Best Management Plans</p> <p>Any permittee which has above ground bulk storage capacity, of more than 1320 gallons or any single container with a capacity greater than 660 gallons, of materials and/or liquids (including but not limited to, all raw, finished and/or waste material) with chronic or acute potential for pollution impact on waters of the State and not subject to Mississippi Hazardous Waste Management Regulations or 40 CFR 112 (Oil Pollution Prevention) regulations shall provide secondary containment as found in 40 CFR 112 or equivalent protective measures such as trenches or waterways which would conduct any tank releases to a permitted treatment system or sufficient equalization or treatment capacity needed to prevent chronic/acute pollution impact. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(12)(a).]</p>
T-65	<p>Reopener Clause</p> <p>This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation or storm water regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation or regulation so issued or approved:</p> <ol style="list-style-type: none"><li>1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or</li><li>2. Controls any pollutant not limited in the permit.</li><li>3. This permit shall be modified to reflect any additional or otherwise more stringent limitations and additional monitoring as determined to be necessary by the results of a Completed TMDL. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.F(1).]</li></ol>
T-66	<p>Closure Requirements</p> <p>Should the permittee decide to permanently close and abandon the premises upon which it operates, it shall provide a Closure Plan to the Permit Board no later than 90 days prior to doing so. This Closure Plan shall address how and when all manufactured products, by-products, raw materials, stored chemicals, and solid and liquid waste and residues will be removed from the premises or permanently disposed of on site such that no potential environmental hazard to the waters of the State will be presented. Closure plan(s) submitted to and approved by Mississippi Department of Environmental Quality for compliance with other environmental regulations will satisfy the closure requirements for those items specifically addressed in the closure plan(s) as long as the closure does not present a potential for environmental hazard to waters of the State. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(11).]</p>

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Meridian POTW

Facility Requirements

Permit Number MS0020117

Activity ID No.: PER20140002

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**AI0000013261 (continued):**

**Narrative Requirements:**

---

Condition

No.            Condition

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T-67            Permit Actions

The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a modification of planned changes or anticipated noncompliance, does not stay any permit condition. [11 Miss. Admin. Code Pt. 6, R. 1.1.5.C(5).]

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Meridian POTW

Facility Requirements

Permit Number MS0020117

Activity ID No.: PER20140002

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**RPNT0000000002 (MS0020117-101) Outfall 101 (Internal Outfall from Meridian POTW):**

**Submittal/Action Requirements:**

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Condition

No.      Condition

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S-1      The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [WPC-1 Chapter One IV.A(15)c]

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Meridian POTW

Facility Requirements

Permit Number: MS0020117

Activity ID No.: PER20140002

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**RPNT0000000003 (MS0020117-201) Outfall 201 (Internal Outfall from East Meridian POTW):**

**Submittal/Action Requirements:**

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Condition

No.      Condition

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S-1      The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [WPC-1 Chapter One IV.A(15)c]

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Meridian POTW  
Facility Requirements  
Permit Number:MS0020117  
Activity ID No.: PER20140002

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**RPNT0000000004 (MS0020117-002) Outfall 002 (Combined Domestic / Municipal Wastewater Effluent from Outfall 101 and 201):**

**Submittal/Action Requirements:**

---

Condition

No.          Condition

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S-1          The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [WPC-1 Chapter One IV.A(15)c]

## GENERAL INFORMATION

Meridian POTW  
311 27th Avenue  
Meridian, MS  
Lauderdale County

### Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
13261	City of Meridian	Official Site Name	3/14/1995	
MS0020117	Meridian POTW	Water - NPDES	3/15/2000	2/22/2005
MS0020117	Meridian POTW	Water - NPDES	3/14/1995	3/13/2000
MS0020117	Meridian POTW	Water - NPDES	2/22/2005	1/31/2010
MS0020117	Meridian POTW	Water - NPDES	6/8/2010	11/12/2013
MS0020117	Meridian POTW	Water - NPDES	11/12/2013	5/31/2015

**Basin:** Pascagoula River Basin

### Location Description:

**Relevant Documents:** Cover Letter, Lab Data, Form 2A

\*\*\* Draft Permit \*\*\*

**FACT SHEET**

**APPLICATION FOR  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
PERMIT TO DISCHARGE WASTEWATER TO WATERS  
OF THE STATE OF MISSISSIPPI  
June 10, 2015**

Application No.: MS0020117

1. **SYNOPSIS OF APPLICATION**

a. **Name and Address of Applicant**

Meridian POTW  
PO Box 1430  
Meridian, Mississippi 39302-1430

b. **Description of Applicant's Operation**

The collection and treatment of domestic/ municipal wastewater

c. **Production Capacity of Facility**

13 MGD

d. **Description of Existing Pollution Abatement Facilities**

Activated Sludge and SBR

e. **Applicant's Receiving Water**

Sowashee Creek

f. **Description of Discharges**

Outfall 002 is the combined treated effluent discharges from Meridian POTW and East Meridian POTW. The discharge location for Outfall 002 will be the current Meridian POTW treated effluent outfall line into Sowashee Creek. Outfall 101 will represent an internal outfall after final treatment by Meridian POTW. Outfall 201 will represent an internal outfall after final treatment by East Meridian POTW.

2. PROPOSED EFFLUENT LIMITATIONS

See Draft Permit

3. MONITORING REQUIREMENTS

The applicant will be required to monitor regularly for flow and those parameters limited in Section 2 above with sufficient frequency to ensure compliance with the permit conditions. Frequency, methods of sampling, and reporting dates will be specified in the final permit.

4. PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS

Beginning the issuance date of this permit, the permittee shall achieve compliance with the effluent limitations specified in the draft permit.

5. PROPOSED CONDITIONS OF APPLICABILITY AND OTHER REQUIREMENTS

The applicant will be required at all times to operate facilities as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants.

The permittee shall provide an adequate operate staff which is duly qualified to carry out the operation, maintenance and testing functions required to insure compliance specified in the permit.

Maintenance of treatment facilities that result in degradation of effluent quality shall be scheduled during noncritical water quality period and shall be carried out in a manner approved by the Mississippi Office of Pollution Control.

The permittee is required to submit information of a periodic basis on the quality and quantity of effluent introduced into the facility by major contributing industries.

6. WATER QUALITY STANDARDS AND EFFLUENT STANDARDS APPLIED TO THE DISCHARGE

Sawashee Creek is classified as Fish and Wildlife. Limitations were developed through empirical modeling and chemical specific screening.

7. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Mississippi Office of Pollution Control Permit Board proposes to issue an NPDES permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Interested persons are invited to submit written comments on the permit application or on the Permit Board's proposed determinations to the following address:

Mississippi Department of Environmental Quality  
Office of Pollution Control  
P. O. Box 10385  
Jackson, Mississippi 39289-0385

Additional details about the application and the proposed determination, a sketch showing the location of the discharge, and a copy of the draft permit are available by writing Bradley Crain at the Permit Board's address or calling 961-5171.

All comments received prior to the public notice end date will be considered in the formulation of final determinations with regard to this application.

b. Public Hearing

The Permit Board may hold a public hearing if there is a significant degree of public interest in a proposed permit or group of permits. Public notice of such a hearing will be circulated in newspapers in the geographical area of the discharge and to those on the agency's mailing list at least 30 days prior to the hearing.

Following the public hearing, the Permit Board may take such modifications in the terms and conditions of the proposed permits as may be appropriate and shall issue or deny the permit. Notice of issuance or denial will be circulated to those who participated in the hearing and to appropriate persons on the mailing list.

c. Issuance of the Permit When No Public Hearing is Held

If no public hearing is held, and, after review of the comments received, the Permit Board's determinations are substantially unchanged, the permit will be issued and become effective immediately.

If no public hearing is held, but there have been substantial changes, public notice of the Permit Board's revised determinations will be made. Following a 30-day comment period, the permit will be issued and become effective immediately, unless a public hearing is granted.



# PERMIT RATIONALE FOR REISSUANCE

Meridian POTW  
Lauderdale County  
Meridian, Mississippi  
Water NPDES No. MS0020117  
March 2015

## I. FACILITY INFORMATION

Facility Name: Meridian POTW  
Facility Address: 311 27th Avenue  
Meridian, MS 39301

Permit No.: MS0020117  
SIC: 4952  
Permit Writer: Christopher Messemore  
EPD Branch: Municipal and Private Facilities Branch

## II. NATURE OF BUSINESS - Domestic/ Municipal Wastewater

**EFFLUENT AND RECEIVING STREAM FLOW DATA** - Outfall 002 will discharge directly to Sowashee Creek. **See attachment No. 4 for discharge location map.** Sowashee Creek is classified as Fish and Wildlife, and is in the Pascagoula River Basin. The discharge is listed in a proposed TMDL for organic enrichment and low do in Sowashee Creek. Hence, a future TMDL may impose more stringent effluent limits. The effluent limitations included in the permit comply with load allocations given in the TMDL. A condition has been added to the permit which allows it to be reopened for revision based on a future TMDL. Outfall 001 is the previous discharge from Meridian POTW which is listed in the new permit as Outfall 101. Outfall 201 is the is the wastewater from East Meridian POTW. Outfall 002 is the combined treated wastewater from Outfall 101 and 201.

The instream wastewater concentration (IWC) 7Q10 at the point of discharge is determined by the following calculation:

IWC calculation is as follows:

$$\begin{aligned} Q_w &= \text{Design flow of the wastewater treatment facility} = 13 \text{ MGD or } 20.1 \text{ cfs} \\ Q_r &= \text{Receiving stream } 7Q10 = 0.5 \text{ cfs} \\ \text{IWC} &= (Q_w / (Q_w + Q_r)) * 100 = (20.1 / 20.1 + 0.5) = 97 \% \end{aligned}$$

III. 303(d) ISSUES – Sowashee Creek is listed on the 303d list for Total Nitrogen and Total Phosphorus.

IV. TYPE OF WASTEWATER TREATMENT- For Outfall 101 wastewater is collected and treated via second stage activated sludge followed by chlorination disinfection. For Outfall 201 wastewater is collected and treated via a sequencing batch reactor (SBR) followed by UV disinfection and post-aeration.

Outfall 201 (Internal outfall after final treatment by East Meridian POTW)

<u>Parameter</u>	<u>Value</u>	<u>Basis</u>
Flow	1.0 MGD	Design
CBOD <sub>5</sub> (May-Oct)	7 mg/l (Monthly Avg.)	WLA
CBOD <sub>5</sub> (Nov-Apr)	10 mg/l (Monthly Avg.)	WLA
CBOD <sub>5</sub> (Percent Removal)	85% Minimum	Technology
TSS	30 mg/l (Monthly Avg.)	Technology
TSS (Percent Removal)	85% Minimum	Technology
NH <sub>3</sub> -N (May-Oct)	1 mg/l (Monthly Avg.)	WLA
NH <sub>3</sub> -N (Nov-Apr)	2 mg/l (Monthly Avg.)	WLA
Fecal Coliform	200 mg/l (Monthly Avg.)	MSWQS
pH	6.0 – 9.0 SU	MSWQS
Copper, Total Recoverable	0.0051 / 0.0072 mg/l	Toxicity
Total Nitrogen	Report	WLA
Total Phosphorus	Report	WLA

The minimum and maximum values for Dissolved Oxygen in aeration unit and 30-Minute Sludge Settleability in aeration unit must be reported

## Chemical Specific Analysis

Chemical specific analysis has been performed in accordance with State Regulations 11 Miss. Admin. Code Pt. 6, Ch. 1.V1.B1. Municipalities shall determine the toxic characteristics of their wastewater by analyzing for the toxic pollutant listed in Table III of appendix D of 40 CFR 122. The results are tabulated in **attachment No. 2**. The reported values are then analyzed and compared to water quality criteria to determine any possible toxic effect to the receiving waters. A synopsis of these calculations is listed in **attachment No. 3**. A column by column description of the calculations in attachment No. 3 is hereby provided:

Column No. 1 – Maximum concentration. The highest effluent reading of the parameter

Column No. 2 – The maximum concentration mixed with the receiving water IWC. This is calculated by the following equation:

$$\{\text{Maximum Concentration (Column 1)} * \text{IWC \%}\} / 100$$

Column No. 3 – Acute allowable – Chemical Specific State Water Quality Criteria

Column No. 4 – Pass or Fail. If column 2 > column 3 water quality criteria is exceeded and failure occurs.

Column No. 5 – Long term average (LTA) of all tests. The summation of the 12 samples divided by 12.

Column No. 6 – The long term average concentration mixed with the receiving water IWC. This is calculated by the following equation:

$$\{\text{LTA Concentration (Column 5)} * \text{IWC \%}\} / 100$$

Column No. 7 – Chronic allowable – Chemical Specific State Water Quality Criteria

Column No. 8 – Pass or Fail. If column 6 > column 7 water quality criteria is exceeded and failure occurs.

Column No. 9 – Human health determination. Long term average (Column 5) is mixed with the mean annual flow  $IWC_{MA}$ . This is calculated by the following equation:

$$\{\text{LTA Concentration (Column 5)} * \text{IWC}_{MA} \%\} / 100$$

Column No. 10 – Human health allowable – State Water Quality Criteria Note: Organisms only column is used if receiving waters are not drinking water supply.

Column No. 11 – Pass or Fail. If column 9 > column 10 water quality criteria is exceeded and failure occurs.

## CATEGORICAL GUIDELINE LIMITATIONS CALCULATIONS

Major municipalities shall determine the toxic characteristics of their wastewater by analyzing for the toxic pollutant listed in Table III of appendix D of 40 CFR 122. Chemical specific analysis shall be for total recoverable metals. Municipalities shall submit twelve influent and effluent samples collected. Chemical specific limits shall be placed in a permittee's permit if any of the parameters evaluated in the toxic screening procedure indicated that reasonable potential for violations of the appropriate criteria (acute, chronic, and human health).

### **Chemical Specific Analysis for Metals and Results**

Major municipalities shall determine the toxic characteristics of their wastewater by analyzing for toxic pollutants listed in Table II of Appendix D of 40 CFR 122. Metal analysis shall be for total recoverable metals. Municipalities shall submit twelve influent and effluent samples collected. Chemical specific limits shall be placed in a permittee's permit if any of the parameters evaluated in the toxic screening procedure indicate the reasonable potential for violation of the appropriate criteria (acute, chronic, and human health).

The chemical specific data results submitted or Discharge Monitoring Results submitted in the last 2 years did indicate the reasonable potential for violation of the appropriate criteria in Table III of Appendix D of CFR 122 for Total Recoverable Copper. Chemical specific limits have been place in the permit for both parameters.

**Attachment #2  
Outfall 101 – CSA**

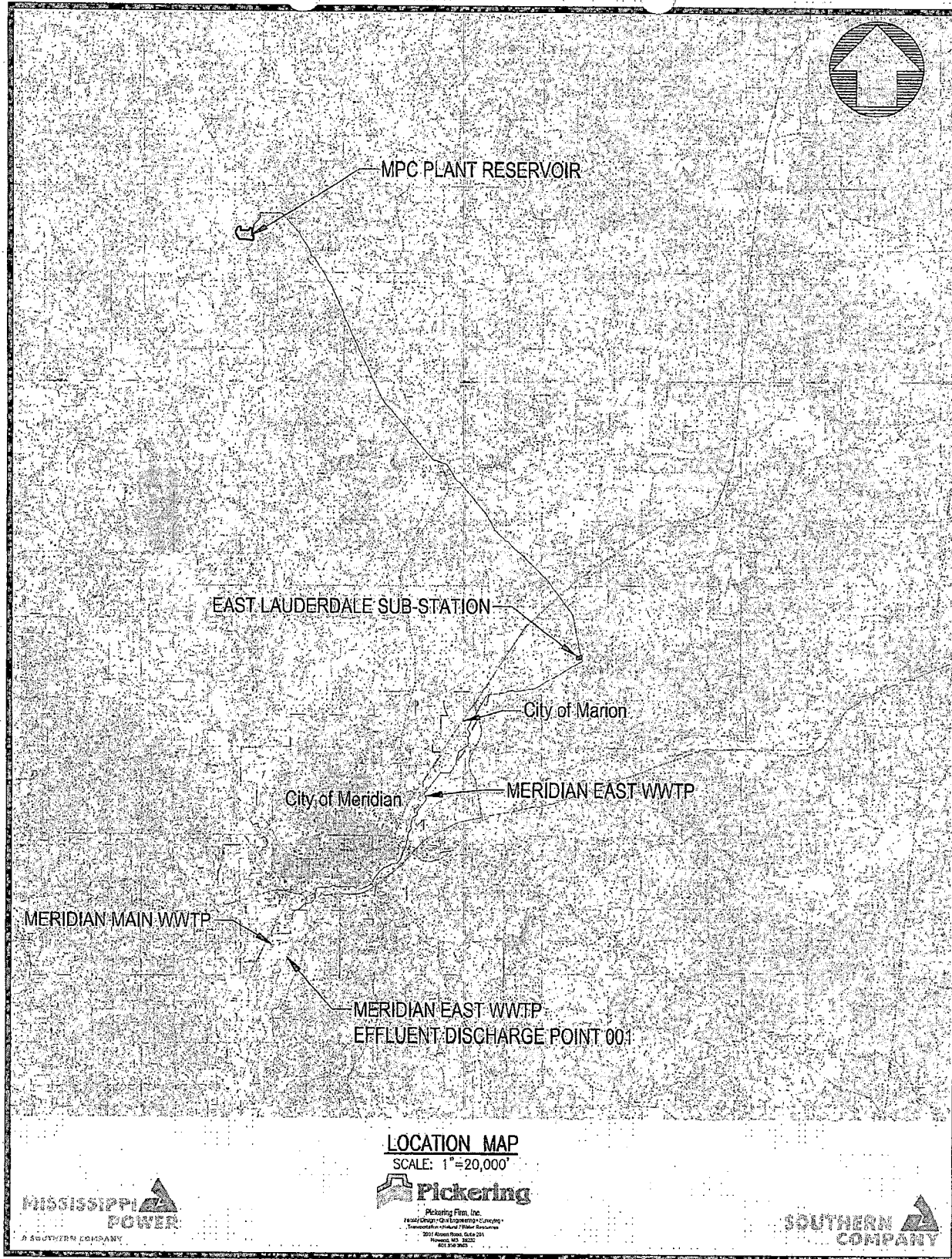
Chemical Specific Analysis Results For Meridian POTW Outfall 01																	
Parameters	7/28/2014	8/6/2014	8/11/14	8/15/14	8/27/15	9/8/14	9/15/14	10/6/14	10/14/14	11/3/14	11/10/14	12/2/14	12/9/14	1/5/15	1/12/15	Avg.	Max
Antimony						0.00982							0.0028	0.0176		0.00228	0.0176
Arsenic	0.000515		0.000674						0.00202		0.000554	0.00158				0.00041	0.002
Beryllium																0	0
Cadmium								0.00015	0.00015							2.1E-05	0.0002
Chromium	0.00143		0.0012			0.0015							0.0011	0.00129	0.00172	0.00064	0.0017
Chromium HEX																0	0
Copper	0.00557		0.00581	0.00493		0.00499	0.00484	0.00561	0.00758	0.00384	0.00353	0.00466	0.00679	0.00385	0.00392	0.00502	0.0076
Lead													0.000673	0.000606		9.8E-05	0.0007
Mercury	4.28E-06		1.77E-06	1.5E-06	1.37E-05	5.36E-06	1.36E-05	5.73E-06	3E-06	3.87E-06	3.79E-06	9.46E-06	5.45E-06	8.12E-06		6.1E-06	1E-05
Nickel	0.00261		0.00224	0.00236		0.00241	0.00193	0.00188	0.00313	0.00198	0.00193	0.00197	0.00229	0.00198	0.0022	0.0022	0.0031
Selenium																0	0
Silver													0.000115	0.000186		2.3E-05	0.0002
Thallium																0	0
Zinc	0.0286		0.0206	0.031		0.0313	0.0298	0.031	0.00303	0.027	0.0251	0.0619	0.0341	0.033	0.0215	0.02907	0.0619
Cyanide						0.008										0.00062	0.008
Phenolic Compounds						0.056										0.00431	0.056
Pentachlorophenol																0	0
Hardness	65.3		67.6	80.8		85.4	76.6	84.9	99.6	89.1	80.4	82.4	85.3	67.7	70.2	79.6385	
Influent	7/28/2014		8/11/14	8/15/14		9/8/14	9/15/14	10/6/14	10/14/14	11/3/14	11/10/14	12/2/14	12/9/14	1/5/15	1/12/15	Average	
Copper	0.0212		0.0197	0.0177		0.0166	0.0191	0.0072	0.024	0.014	0.018	0.018	0.013	0.00767	0.0246	0.01592	

# Attachment #3 Outfall 101

## CHEMICAL SPECIFIC SCREENING CALCULATION SHEET

FACILITY:	Meridian POTW - Outfall 101			PERMIT No:	MS0020117		Average Hardness	50			
IWC (%) =	97.00			MA (%) =							
***USED IWC WHICH IS WORSECASE THANMA, HOWEVER IF NEEDED WILL USEMA***											
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
	Max.	Max Downstream	Acute Criteria	Pass or	Long Term Average of	LTA Downstream	Chronic Criteria	Pass or	LTA Downstream	Human Health	Pass or
PARAMETER	Conc. (mg/l)	Conc. (mg/l) *	Allowable (mg/l)	Fail	All Tests (mg/l)	Conc. (mg/l) **	Allowable (mg/l)	Fail	Conc. (mg/l) ***	Allowable (mg/l)	Fail
Antimony	0.0176	0.017072	0	—	0.002284615	0.002216077	0	—	0.002216077	0	—
Arsenic	0.00202	0.00195940	0.34	PASS	0.000410846	0.000398521	0.15	PASS	0.000398521	0.024	PASS
Beryllium	0	0	0	PASS	0	0	0	PASS	0	0	PASS
Cadmium	0.000153	0.00014841	0.00103	PASS	2.06154E-05	1.99969E-05	0.000151892	PASS	1.99969E-05	0.168	PASS
Chromium, (III)	0.00172	0.0016684	0.322961712	PASS	0.000635385	0.000616323	0.042010683	PASS	0.000616323	140.468	PASS
Chromium, Hex	0	0	0.016	PASS	0	0	0.011	PASS	0	1.47	PASS
Copper	0.00758	0.0073526	0.006994234	PASS	0.005024815	0.004873877	0.004953041	PASS	0.004873877	1	PASS
Lead	0.000673	0.000653	0.030135914	PASS	9.83846E-05	9.54331E-05	0.001174353	PASS	9.54331E-05	0.015	PASS
Mercury	0.0000137	0.000013289	0.0021	PASS	6.12615E-06	5.94237E-06	0.000012	PASS	5.94237E-06	0.000153	PASS
Nickel	0.00313	0.0030361	0.260491299	PASS	0.002200769	0.002134746	0.028932541	PASS	0.002134746	4.584	PASS
Selenium	0	0.00000000	0.0118	PASS	0	0	0.0046	PASS	0	3.365	PASS
Silver	0.000186	0.00018042	0.000976443	PASS	2.32308E-05	2.25338E-05	0	—	2.25338E-05	0.1	PASS
Thallium	0	0	0	PASS	0	0	0	PASS	0	0	—
Zinc	0.0619	0.0600430	0.065131707	PASS	0.029071538	0.028199392	0.065664482	PASS	0.028199392	5	PASS
Cyanide	0.008	0.00776	0.022	PASS	0.000815385	0.000896923	0.0052	PASS	0.000896923	220	PASS
Phenol	0.056	0.05432	0.3	PASS	0.004307692	0.004178462	0.102	PASS	0.004178462	0.3	PASS
Penta	0	0	0.0087	PASS	0	0	0.0067	PASS	0	0.0082	PASS
* Max. Conc. X IWC/100											
** LTA X IWC/100											
*** LTA X MA/100											
Notes:											
ND denotes a value that is non-detected and/ or is given a value of zero.											
The IWC is simply the percentage of the receiving stream's flow that the applicant uses during low flow conditions.											
The MA is the percentage of the receiving stream's flow that the applicant uses during average flow conditions.											
Criteria was adjust for Hardness Dependent Parameters based on the average hardness.											

# Attachment #4





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

MAY 06 2014

CERTIFIED MAIL 7012 1010 0002 0759 6854  
RETURN RECEIPT REQUESTED

The Honorable Percy Bland  
Mayor, City of Meridian  
601 23rd Avenue  
Meridian, Mississippi 39302

Re: U.S. Environmental Protection Agency and Mississippi Department of Environmental  
Quality Compliance Evaluation Inspection  
Notice of Violation, Notice of Opportunity to Show Cause and Information Request  
National Pollutant Discharge Elimination System Permit Nos.: MS0020117 and MS0055735  
Meridian South Publically Owned Treatment Works and Meridian East Publically Owned  
Treatment Works

Dear Mayor Bland:

On April 8 – 9 2014, the U.S. Environmental Protection Agency Region 4 and the Mississippi Department of Environmental Quality (MDEQ) conducted a Compliance Evaluation Inspection (CEI) of the City's Wastewater Collection and Transmission System (WCTS) associated with the Meridian South Wastewater Treatment Plant (South WWTP) and the Meridian East Wastewater Treatment Plant (East WWTP) and also performed a Reconnaissance Inspection on the City's South WWTP. The objective of this CEI was to assess the City's compliance with the Clean Water Act (CWA) and the City's National Pollutant Discharge Elimination System (NPDES) permits. Additionally, the EPA evaluated the City's Management, Operations and Maintenance Programs related to its WCTS and assessed the overall condition of the South WWTP. The inspection results are summarized in the enclosed inspection report.

During the CEI, the City provided the EPA with information gathered from its Wastewater Division customer complaint database. The EPA has several questions regarding the database, which are outlined below. The EPA also has questions outlined below regarding Sanitary Sewer Overflows (SSOs).

1. Please provide the date and street address for the works orders provided to the EPA during the CEI from January 2011 to present.
2. What does the "Line Numb" column represent in the spreadsheet submitted to the EPA during the CEI?
3. For purposes of this Information Request, a sanitary sewer overflow (SSO) is an overflow, spill, release, or diversion of wastewater from the sanitary sewer system. SSOs include overflows or releases of wastewater that reach waters of the U.S.; overflows or releases of wastewater that do not reach waters of the U.S.; and wastewater backups into buildings that are caused by blockages

or flow conditions in a sanitary sewer other than a building lateral. Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned is not an SSO.

Provide a listing of all SSOs that occurred from September 2008 to the present. For each SSO provide the following:

- a. Date(s) of the SSO;
- b. Time (and Date if other than a. above) when the City was notified that the SSO event occurred;
- c. Time (and Date if other than a. above) when the City (or contractor) crew responded to the SSO;
- d. Time (and Date if other than a. above) when the SSO ceased;
- e. Time (and Date if other than a. above) when corrective action was completed;
- f. Location of the SSO, including source (pump station, manhole, etc.);
- g. Ultimate destination of the SSO, such as surface waterbody (by name, if available), storm drain leading to surface waterbody (by name, if available), dry land, building, etc.;
- h. Volume of the SSO;
- i. Cause of the SSO such as grease, roots, other blockages, wet weather (infiltration and inflow), loss of power at pump station, pump failure, etc.;
- j. Corrective actions taken to stop the SSO; and
- k. Corrective actions taken to prevent this or similar SSOs in the future.

If available, please provide the above information in a Microsoft compatible spreadsheet

Pursuant to Section 308 of the CWA, 33 U.S.C. § 1318, the EPA hereby requests the City to provide the information set forth in the questions above. The City is required to respond to this information request, as well as the enclosed CEI report, within 30 days of its receipt of this letter. The response should be directed to:

Ms. Sara Schiff, Enforcement Officer  
U.S. Environmental Protection Agency, Region 4  
Clean Water Enforcement Branch  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303-8960

The City's response to this information request should specifically reference the particular question number of the request and should be organized for the purpose of clarity. In addition, all information submitted must be accompanied by the following certification signed by a responsible City official in accordance with 40 C.F.R. § 122.22:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Failure to comply with this information request may result in enforcement proceedings under Section 309 of the CWA, 33 U.S.C. § 1319, which could result in the judicial imposition of civil or criminal penalties or the administrative imposition of civil penalties. In addition, there is potential criminal liability for the falsification of any response to the requested information.

The City shall preserve, until further notice, all records (either written or electronic) which exist at the time of receipt of this letter that relate to any of the matters set forth in this letter. The term "records" shall be interpreted in the broadest sense to include information of every sort. The response to this information request shall include assurance that these record protection provisions were put in place as required. No such records shall be disposed of until written authorization is received from the Chief of the Clean Water Enforcement Branch at the U.S. EPA, Region 4.

Based upon review of information collected during this inspection, the EPA has determined that the City violated the CWA as follows:

1. During the period of November 24, 2010, through March 28, 2014, the City had 74 SSOs that discharged untreated sewage from the City's WCTS associated with either the South WWTP or the East WWTP, as recorded on SSO report records submitted by the City to MDEQ and obtained by the EPA. The EPA also observed SSOs during the CEI in three locations and several manholes located throughout the City along Sowashee Creek and the service road leading to the East WWTP that reached navigable waters of the U.S., as defined by Section 502 of the CWA, 33 U.S.C. § 1362. Such SSOs were not authorized by the NPDES permits. SSOs that reach waters of the U.S. are violations of Section 301(a) of the CWA, 33 U.S.C. § 1311(a).
2. SSOs that reach waters of the U.S. and SSOs that do not reach waters of the U.S. are also indicative of improper operation and maintenance of the WCTS. Therefore, the City is in violation of the South WWTP Permit No. MS0020117, Condition T-28 (Proper Operation, Maintenance and Replacement), which requires the City to operate and maintain all components of the system to achieve compliance with the conditions of the permit and Permit Condition T-29 (Duty to Mitigate), which requires the City to minimize or prevent discharges from the system.
3. The East WWTP is permitted under Permit No. MS0055735, which contains the same operation, maintenance and replacement and duty to mitigate requirements as the South WWTP, but contains different permit condition numbers. Therefore, the City is also in violation of the East WWTP's Permit Condition T-27 (Proper Operation, Maintenance and Replacement) and T-28 (Duty to Mitigate).
4. The City has also failed to perform basic maintenance requirements for the Meridian South Plant, in violation of the South WWTP's Permit Condition T-27 (Proper Operation, Maintenance and Replacement). Specifically, the weir to Clarifier 2 is allowing short circuiting of the treatment process due to damaged or broken weir plates in the clarifier and one Return Activated Sludge (RAS) line is not discharging RAS properly into an aeration basin due to a ruptured RAS pipe.
5. The City has also violated the effluent limitations in its Permits on numerous occasions as indicated by the effluent exceedances listed in Enclosure B.

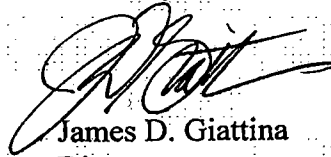
Until compliance with the CWA is achieved, the City is considered to be in violation of the CWA and subject to enforcement action pursuant to Section 309 of the CWA, 33 U.S.C. § 1319. This Section

provides for the issuance of administrative penalty and/or compliance orders and the initiation of civil and/or criminal actions.

To resolve the identified violations and discuss the EPA's possible enforcement actions, including the assessment of appropriate civil penalties, we request that representatives of the City contact Ms. Sara Schiff at (404) 562-9870 or via email at [schiff.sara@epa.gov](mailto:schiff.sara@epa.gov), within five business days of receipt of this letter to make arrangements for a conference. In lieu of appearing in the EPA's offices for this meeting, a telephone conference may be scheduled. The City's representatives should be prepared to provide all relevant information with documentation pertaining to the above violations including, but not limited to, any financial information, which may reflect the City's ability to pay a penalty. You have the right to be represented by legal counsel. Failure to appear may result in an immediate enforcement action against the City. The EPA may consider information provided during the meeting or telephone conference in any enforcement proceeding related to this matter.

If you should have any questions regarding this matter, please contact Ms. Sara Schiff. Legal inquiries should be directed to Ms. Tanya Floyd, Associate Regional Counsel, at (404) 562-9813 or via email at [floyd.tanya@epa.gov](mailto:floyd.tanya@epa.gov).

Sincerely,



James D. Giattina  
Director  
Water Protection Division

Enclosure

cc: Mr. Hugh Smith  
City of Meridian

Mr. Chris Sanders  
Mississippi Department of Environmental Quality

Mr. Les Herrington  
Mississippi Department of Environmental Quality

## ENCLOSURE A

### Compliance Evaluation Inspection Report

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Region 4**

**Water Protection Division  
Clean Water Enforcement Branch**



**WASTEWATER COLLECTION AND TRANSMISSION SYSTEM  
COMPLIANCE EVALUATION INSPECTION  
AND  
WASTEWATER TREATMENT PLANT RECONNAISSANCE INSPECTION  
REPORT**

**Public Works Department  
City of Meridian  
Lauderdale County  
Mississippi**

**NPDES Permit Nos. MS0055735 and MS0020117**

**Facility Address:  
311 27<sup>th</sup> Avenue  
Meridian, Mississippi 39302**

**Inspection Date:  
April 8 - 9, 2014**

**Inspectors:  
Dennis Sayre, EPA Region 4  
Sara Schiff, EPA Region 4  
Jim Harvey, MDEQ**

**Inspection Report Prepared by:  
Dennis Sayre**

**April 18, 2014**

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## ABBREVIATIONS AND ACRONYMS

CEI	Compliance Evaluation Inspection
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	United States Environmental Protection Agency
GIS	Geographic Information System
GPM	Gallons per Minute
I/I	Infiltration/Inflow
ICIS	Integrated Compliance Information System
MDEQ	Mississippi Department of Environmental Quality
NPDES	National Pollutant Discharge Elimination System
MGD	Million Gallons per Day
MOM	Management, Operation, and Maintenance
PS	Pump Station
SORP	Sewer Overflow Response Plan
SSO	Sanitary Sewer Overflow
WCTS	Wastewater Collection and Transmission System
WWTP	Wastewater Treatment Plant

## I. OVERVIEW

The Meridian Public Works Department consists of seven divisions: Engineering, Construction, Administration, Environmental, Business Operations, Water, and Wastewater. The Wastewater Division provides sanitary sewer services for residential, commercial and industrial entities within the City of Meridian (the City) and receives domestic wastewater from Meridian Naval Air Station, Key Field Air National Guard Base, the City of Marion (Population: approximately 1500), and the East Mississippi Correctional Facility that lies outside the Meridian city limits. The Wastewater Division is responsible for the operation and maintenance of two wastewater treatment facility, approximately 330 miles of sewer gravity line and force mains, 66 pump stations and other sewer related appurtenances serving approximately 40,800 residential customers within the city limits.

In March 2014, the Clean Water Enforcement Branch, EPA Region 4 received a citizen's complaint with photographic evidence and location descriptions that described a series of illicit discharges originating from the City's wastewater collection and transmission system (WCTS). Subsequently, the EPA conducted a Compliance Evaluation Inspection (CEI) of the City's sewer system on April 8 through April 9, 2014. The purpose of this CEI was to evaluate compliance with the CWA as it relates to Sanitary Sewer Overflows (SSOs) from the WCTS and to assess the City's Management, Operations and Maintenance (MOM) programs. Additionally, the purpose of this compliance inspection was to substantiate the citizen's complaint and to examine the causes and potential corrective actions for SSOs from the WCTS.

On April 8, 2014 the EPA conducted an independent reconnaissance inspection as a pre-requisite site visit of locations identified in the citizen's complaint. The City experienced 1.61 inches of rain on April 7<sup>th</sup> and 0.47 inches of rain on April 8<sup>th</sup>, according to Key Field Airport data. The EPA photographed several SSOs on April 8<sup>th</sup>. On April 9<sup>th</sup>, the EPA and the Mississippi Department of Environmental Quality (MDEQ) conducted a CEI with the City, which the EPA requested written documentation of any MOM programs that the City may use to operate and maintain the WCTS. The EPA also discussed inspection and maintenance records, interviewed management personnel and visited various sites in the WCTS, including some of the SSOs that were sighted the previous day, and two pump stations. This report describes EPA's findings, identifies areas of concern and presents preliminary recommendations.

## II. OBJECTIVES

The specific objectives of the inspection were to assess the City's compliance with the CWA, evaluate reported SSOs, assess the MOM programs, where implemented, and to examine the causes of SSOs in the City's sewer system.

### III. INVESTIGATION METHODS

The investigation included:

- Review of citizen's complaint;
- Review of the Integrated Compliance Information System - National Pollutant Discharge Elimination System (ICIS-NPDES) federal database, state documents and the NPDES Permit;
- Interviews with the City's Wastewater Division personnel and Public Works Director; and,
- Visual inspection.

### IV. REGULATORY SUMMARY

The MDEQ is authorized under the CWA to implement the NPDES program in Mississippi. The Meridian South Wastewater Treatment Plant (South Plant) is authorized under MDEQ's NPDES Permit No. MS0020117 (the South Permit) and the Meridian East Plant (East Plant) is authorized under the NPDES Permit No. MS0055735 (the East Permit) to discharge treated sewage into Sowashee Creek. The City is currently transitioning to a 100% re-use system by supplying 100% (or near 100%) of the flow from the combined South Plant and East Plant flow to be used as cooling water for the Southern Company power plant currently under construction in Kemper County. The East Plant outfall has been diverted to the South Plant for mixing and eventual discharge to a Southern Company power plant; however, the combined flow is currently being discharged into Sowashee Creek using the South Plant outfall until such time that the power plant construction is completed and capable of accepting flow from the City. The MDEQ is working to combine the South Plant and East Plant permits into one permit. Both NPDES permits are currently valid. Estimated tie-in, according to Meridian officials, is August 2014. The South Plant and the East Plant are both major dischargers with a combined permitted capacity of 14 million gallons per day (MGD).

The Sowashee Creek is a major tributary of the Pascagoula River in the Pascagoula River Basin and is listed on Mississippi's 2010 and 2012 303(d) list as impaired for Nitrogen and Phosphorus. MDEQ has also developed Total Maximum Daily Loads (TMDLs) for Sowashee Creek to address previous 303(d) listed impairments; including a Sedimentation TMDL and an Organic Enrichment/ Low Dissolved Oxygen TMDL.

SSOs are prohibited discharges based on Sections 301 and 402 of the CWA which generally prohibit the discharge of pollutants by any person unless authorized by an NPDES permit. The East Permit Condition No.T-27 and the South Permit Condition No. T-28 requires the City to minimize or prevent discharges. The East Permit Condition No.T-28 and the South Permit Condition No. T-29 also requires the City to operate and maintain all components of the system to achieve compliance with the conditions of the permit.

## V. INSPECTION SUMMARY AND FINDINGS

The EPA performed a pre-inspection evaluation and an on-site inspection of the WCTS. The pre-inspection evaluation of the City's WCTS consisted of examining historic records submitted by the City. This section will provide a summary of both means of inspection as well as any recommendations to the City to improve the WCTS performance.

### A. Management Interview

The EPA met with the City's Director of Public Works (the Director), the Utility Line Superintendent, and a MDEQ staff member at 8:00 a.m., April 9, 2014, at the City's Public Works office. Topics of discussion during the meeting included the use and documentation of any MOM programs, including Mapping, Sewer Overflow Response Plan (SORP), Preventive Maintenance Programs, Operations Programs, Continuous Sewer System Assessment Program (CSSAP), Capacity Assurance Program, and Fats, Oil, and Grease (FOG) Control. The EPA also discussed SSOs that the City may be experiencing, citizen complaints and record keeping.

The EPA discussed concerns relating to SSOs in detail with the Director and inquired about each program listed above to determine whether a formal or non-formal (not in writing) program existed to manage various maintenance and operations needs of the WCTS.

The City has its WCTS mapped in a GIS-based map that displays sewer pipe and manhole locations. The EPA did not examine the details of the GIS mapping system or what data is maintained in the GIS system except for sewer pipes and manhole locations. The City does not have an advanced GIS add-on to track detailed sewer data.

The City has also developed and implemented a SORP-like document in two separate documents titled "Emergency Response and Contingency Plan" and the "Bypass and Sanitary Sewer Overflow Reporting and Follow-up" documents. These documents include information on responding to and cleaning up an SSO, notification to MDEQ procedures, available equipment, and important contact information. These documents were not closely evaluated during the inspection but they were approved by MDEQ as a product of a previous Agreed Order between the City and MDEQ. These documents do not include guidance on estimating SSO volume.

The City has two jetter-trucks and crews. The City also has three trailer mounted bypass pumps, one camera truck, a hand-held camera, excavation and trenching equipment, spare pipes, manhole structures and fittings to respond to SSOs and perform necessary structural repairs.

The City has 66 pump stations throughout the WCTS. Of the 66 pump stations, none of the pump stations have onsite emergency back-up power. The City has three trailer mounted pumps, one or two portable emergency generator used for emergency pump station operations. The City does not appear to have formal written preventive maintenance or

operations programs, but the City demonstrated that they have a routine pump station inspection program and perform maintenance as needed.

The City does not have a formal CSSAP. The City is performing pieces of a typical CSSAP, such as periodic wet well and manhole inspections.

The City does not have any formal, written preventive maintenance programs for maintenance of the WCTS.

The City does not have a formal capacity assurance program to ensure adequate capacity in the system for new sewer connections.

The City has no formal written FOG program; however, the Public Works Department is authorized to inspect grease traps. The City's Sewer Use Ordinance sets the effluent standard for grease concentrations to be 100 mg/l maximum, businesses that exceed that concentration requires a grease interceptor or grease trap. The Public Works Department did not present any formal grease trap inspection schedule or program. The City's Line Superintendent stated that approximately 75% of the City's SSOs originate from grease related blockages.

The City has a rudimentary customer complaint system and procedures that rely on the initiation of paper work orders within the Public Works office to respond to, and address customer complaints during normal business hours. The Public Works call-in number is publicized on the City's website. Outside of normal business hours, complaint calls are received at the Drinking Water Plant. Paper work orders are entered into a basic database software system (IBM AS400 software) to track and maintain basic records; however, there are no established procedures to maintain the original customer complaint record and the database being used to track work orders is old and rather antiquated for a City of this size. Weekly reports are routed to the Director for review and copied to the Mayor and City Council.

## **B. SSO Observations**

Discharges to waters of the United States from sanitary sewer systems are prohibited unless authorized by an NPDES permit. In addition, overflows from the sewer system that do not reach waters of the United States can be indicative of a failure to comply with the proper operation and maintenance provisions of City's permits.

An examination of the information submitted to the EPA from a concerned citizen indicated that the City is experiencing SSOs in various locations, most of which appeared to be occurring along a major trunk line that runs alongside of Sowashee Creek. This portion of the City's WCTS provides flow to the South Plant. Figure 1 shows the approximate locations of the SSOs reported via citizen's complaint.

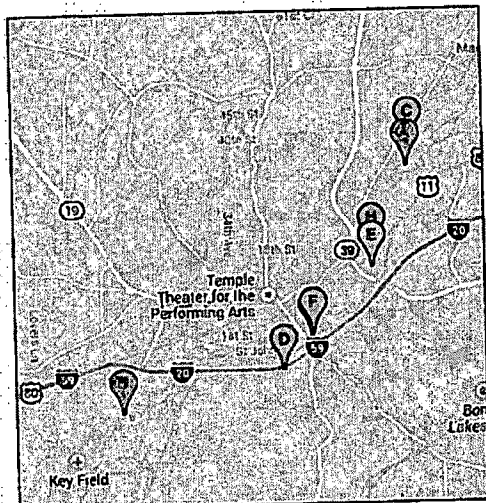


Figure 1. Orange and green pins indicate SSO locations, blue pin A is the East Plant, blue pin B is the South Plant.

Figures 2 through 6 are SSO locations discovered on April 8<sup>th</sup> and April 9<sup>th</sup>.

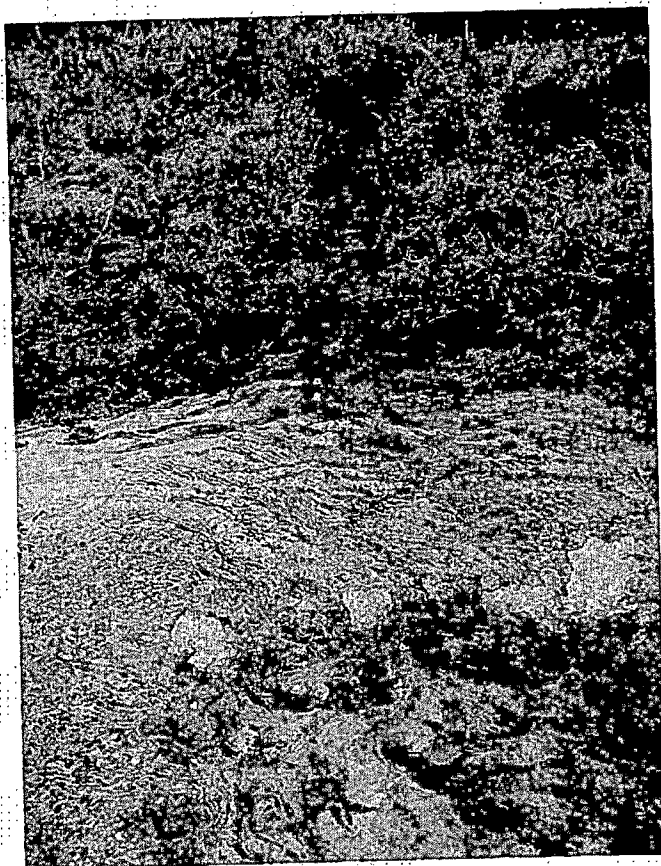


Figure 2. An SSO located on Sowashee Drive occurring on April 8, 2014. The ditch was dug by an unknown citizen, not the City (according to the City), and diverts flow from the manhole directly into a tributary creek of Sowashee Creek. The flow from the SSO would have entered the creek without the ditch. The EPA discovered three manholes on Sowashee Drive that were actively discharging.



Figure 3. This manhole is also located on Sowashee Drive and is one manhole upstream of the manhole in Figure 2. This manhole was uncovered on April 9, 2014. The surcharged condition of this manhole is 6 inches from the lid. Massive root build-up at the crown is evident.



Figure 4. An active SSO located next to Sowashee Creek behind businesses near 108 U.S. Hwy 80 on April 8, 2014. The inspection team returned to this sight with MDEQ and the City and noted that the pipe was still surcharged to the top of the manhole on April 9, 2014.



Figure 5. This is the same manhole pictured in Figure 4. This manhole experienced enough pressure to blow the manhole lid off of the crown (arrow) and flows often enough, and strong enough to cut a substantial open channel to Sowashee Creek. Multiple manholes along this stretch of pipe had misplaced (but not blown off of the crown) manhole lids.

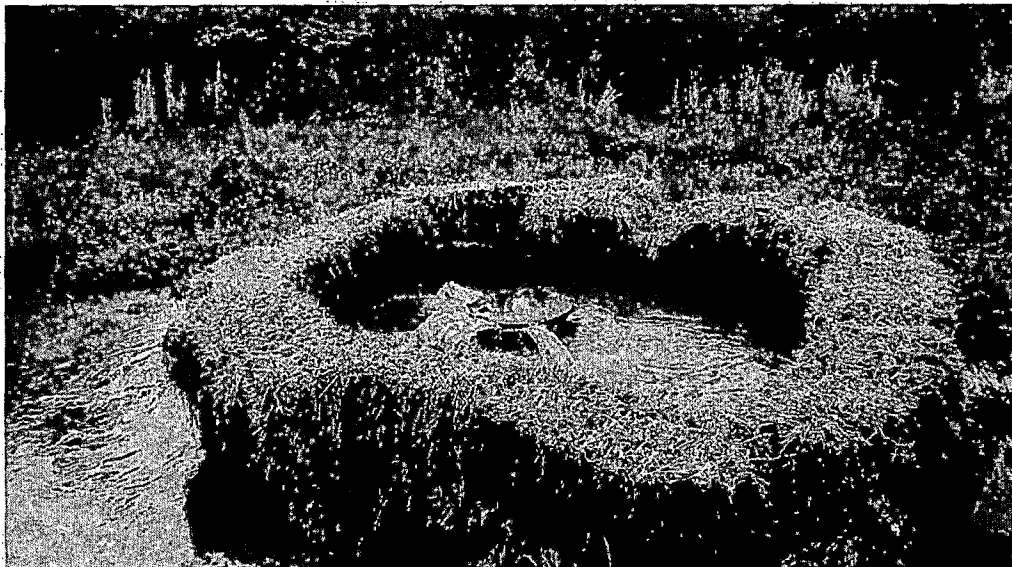


Figure 6. This SSO was observed on April 8, 2014 on the service road leading to the East Plant. The inspection team did not revisit this site with MDEQ or the City.

### C. WWTP Observations

The EPA performed a Reconnaissance Inspection on April 9, 2014, accompanied by MDEQ and the Lead Plant Operator for the South Plant. The following are observations noted during inspection. The South Plant is a conventional activated sludge treatment plant. The South Plant consists of the originally designed activated sludge treatment system (the "old side") and a newer activated sludge system (the "new side") that is larger than the original design. Both treatment systems have separate biological treatment trains, including separate chlorine contact chambers, the flow from both treatment trains are blended together before the outfall.

The Mixed Liquor Suspended Solids (MLSS) in the aeration basins appeared to be thin, meaning that the biomass to liquid ratio was low (Figure 7). The Lead Operator stated that the MLSS is about 2500 mg/L. Normal range for this type of plant ranges from 2000 to 4000 mg/L, depending on the individual plant characteristics. 2500 mg/L is within acceptable book limits; however, low MLSS concentrations can lead to permit limit exceedances and it is unclear whether this plant can operate efficiently at 2500 mg/L.

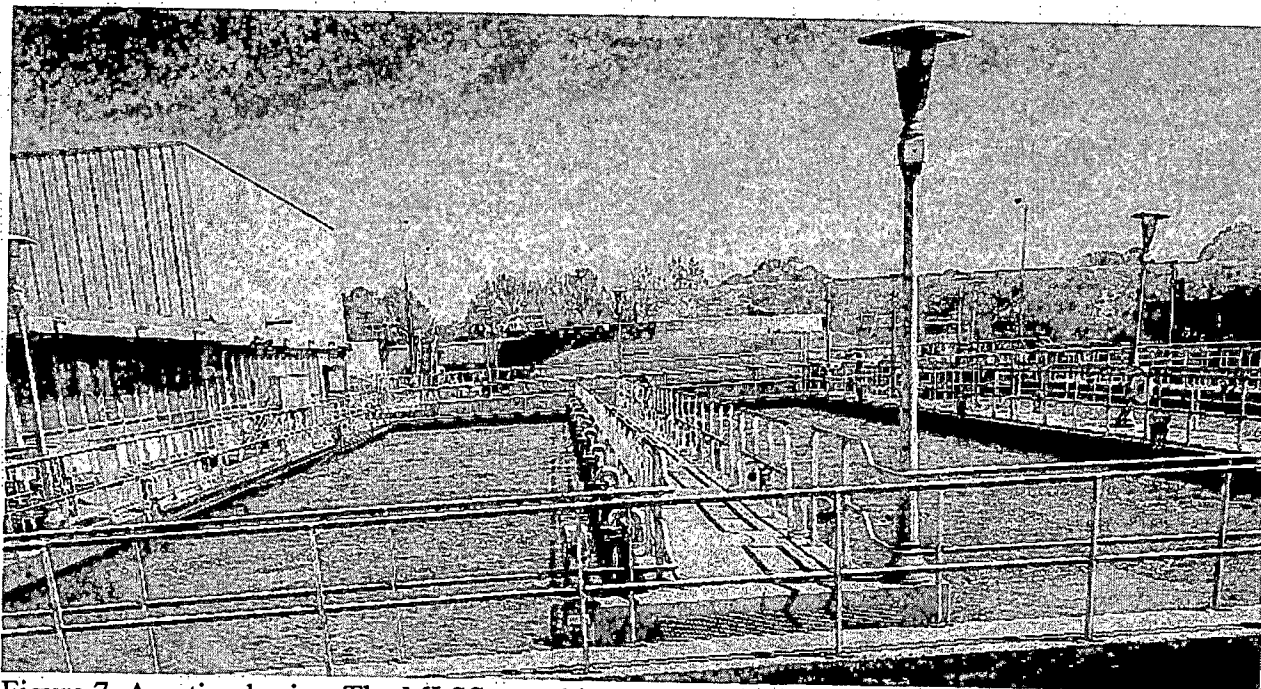


Figure 7. Aeration basins. The MLSS was thin and light brown in appearance.

A "sludge judge" was inserted into Clarifier 1 to measure the sludge blanket levels. The sludge judge measured a low sludge blanket (Figure 8). The Lead Operator stated that he had wasted solids the day before. Nominal sludge depth is determined on a case-by-case basis, but this low of a blanket is indicative of recent wasting operations.



Figure 8. A sludge judge was used to measure sludge blanket depth in Clarifier 1. Sludge depth appeared to be less than one foot in depth.

The inspection team noted several operation and maintenance issues throughout South Plant. The surface skimmers used to remove floating debris for all of the clarifiers have been removed. Removing these skimmers may not have a significant operational impact on the quality of the effluent, but solids floating in the clarifier and algae blooms reported to regularly occur during hotter seasons can cause wear and tear on the equipment. The weir for Clarifier 2 is dysfunctional and short circuiting the system (Figure 9). This type of weir separation was noted on more than one location in Clarifier 2. Significant algae build up was noted on all of the clarifier weirs.

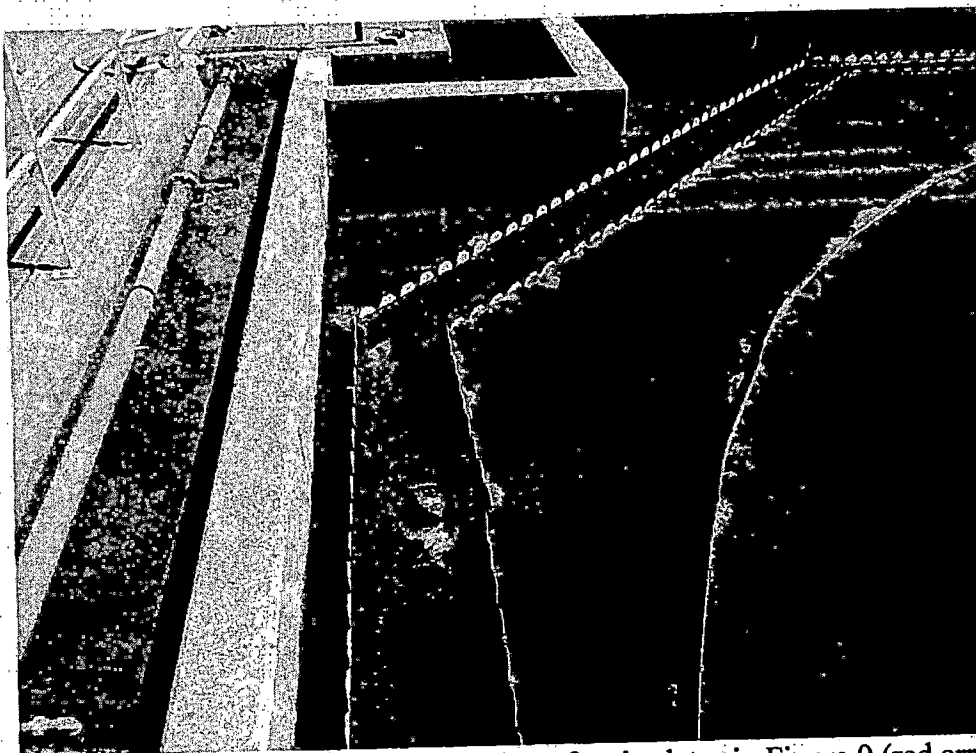


Figure 9. Clarifier 2. Note the separation of weir plates in Figure 9 (red arrow).

The inspectors noted a Return Activated Sludge (RAS) line that is broken above the aeration basin on the "new side" of the plant (Figure 10). The RAS discharging a portion of its flow above the basin may not be affecting the operations of the system, but it is indicative of improper operation and maintenance.

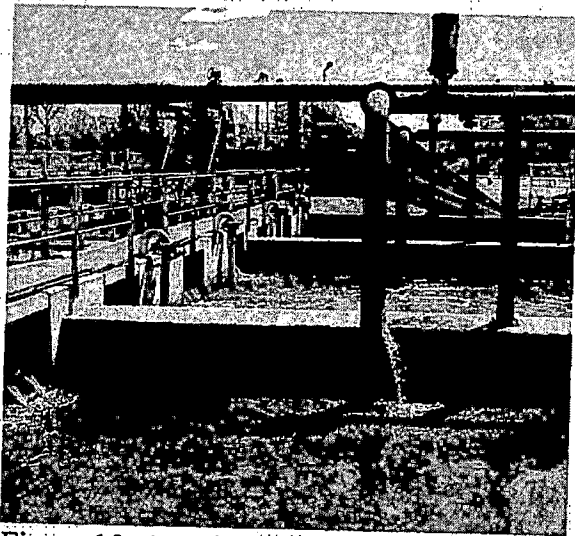


Figure 10. Aeration basin with dysfunctional RAS line.

The inspectors noted that the clarified effluent entering and exiting the chlorine contact chamber on the "new side" was significantly turbid (Figure 11). The flow entering and exiting the "old side" was much less turbid, but not clear.



Figure 11. Chlorine Contact Chamber for the "new side". Flow exiting the chamber was notably turbid and had an unclear appearance.

#### D. Conclusion

The City's personnel were courteous and appear knowledgeable about the system; however, there are some significant deficiencies noted above. The City has not developed and implemented many formal MOM programs, even though they are currently performing some of the work inclusive of the MOM programs.

The City maintains that they have knowledge of the systems wet weather capacity deficiencies. The Director stated that a pump station project is planned to redirect some to the flow that is impacting the length of pipe experiencing SSOs along Sowashee Creek to the East Plant, but the City did not provide supporting evidence that this addition will eliminate the SSOs. Deficiencies noted above are indicative of a Public Works that appears to be undermanned, underfunded and ill-equipped to properly operate and maintain a publically owned treatment system of this size and magnitude. The inspectors noted sewer manholes that were immersed in water (Figure 12 below), manhole crowns displaced from the main structure, manhole lids blown off of the crown, broken major components at the South Plant, all in the measure of less than 10 hours of inspection.

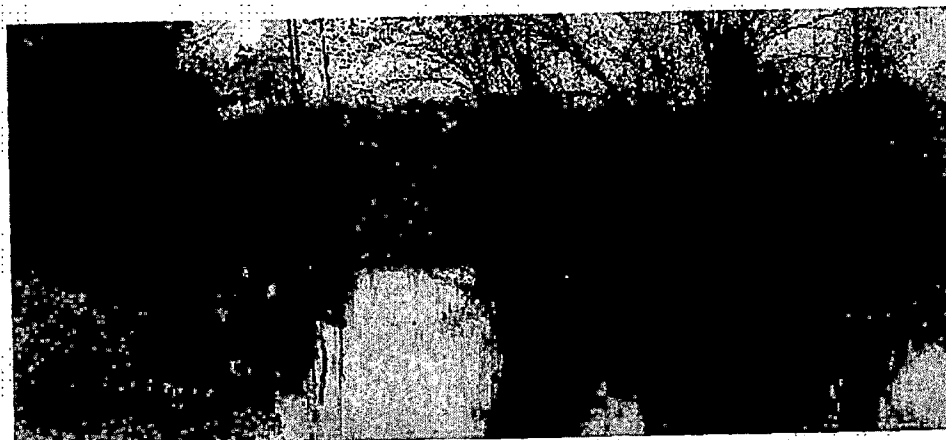


Figure 12. Manhole immersed in water.

The City should immediately take steps to address the wet weather issues in the system and repair damaged components at the South Plant. A thin MLSS at the South Plant may also be indicative of excessive Inflow and Infiltration (I/I) being introduced into the treatment process causing a low MLSS and turbid effluent. The City should immediately take steps to assess the WCTS for excessive I/I that are contributing to the wet weather SSOs and to the likelihood of excessive I/I being introduced into the WWTP.

The City should also update their software for tracking complaints and work order to better maintain records required of the regulatory community and to allow for more efficient trend analysis of the system, among other advantages. The City stated that 75% of the SSOs that occur in the system are FOG related. Given that the known wet weather SSOs are significant in number and volume, the EPA must assume that FOG related SSOs are a significant

problem causing SSOs within the City.

**1. Management, Maintenance and Operations Programs**

The EPA noted some preventive maintenance procedures that the City is utilizing that are in keeping with best management practices to operate and maintain the system; however, the EPA has some major concerns with regard to the City's FOG program, Capacity Assurance Program, Continued Sewer Assessment Program, Infrastructure Rehabilitation Program and other programs that should be formally adopted to properly operate and maintain this size of system. The EPA recommends that the City develop formal written programs for these preventive maintenance procedures and programs. Developing formal written programs will aid the City in refining these programs, which should increase efficiency of the programs and provide guidance for the implementation of these programs that can be passed down to the next maintenance generation.

MOM Program development guidance documents can be found on EPA, Region 4's website at <http://www.epa.gov/region4/water/wpeb/momproject/>. Recommended MOM programs include:

**a. Mapping Program**

Formal Mapping Program documentation should be developed to ensure consistency of map protocol and to provide official guidance for map review and maintenance. The existing GIS program should be expanded to include more sewer specific configuration data and maintenance tracking data such as pipe cleaning and inspection.

**b. Grease Control Program**

The EPA recommends that the City develop documents that outline procedures and provide guidance on how to manage and reduce FOG build-up in the WCTS. A valid FOG program includes providing guidance documents for permitting, inspection, enforcement, compliance tracking, budgeting, establishing inspection priorities, public education guidance and performance goals and provide specific grease control obligations for food service establishments in accordance with City ordinances. Formal FOG program development should include a review of the City's ordinances to ensure that the appropriate Public Works personnel have the ability to adequately enforce FOG related ordinances.

**c. Capacity Assurance Program**

The EPA recommends that the City develop a formal Capacity Assurance Program that includes specific criteria for approval of additions to the system balancing Permit requirements and the City's codes and ordinances; performance measures used to approve or deny an extension of the collection system; and procedures used to

calculate capacity in the collection system and at the treatment plant.

**d. Preventive Maintenance and Inspection Programs**

The EPA recommends that the City develop formal written MOM Programs with aggressive preventive maintenance, inspection and rehabilitation programs that define goals for cleaning, inspection, rehabilitation, preventive maintenance activities, including:

**A Gravity Line Preventive Maintenance Program.** The Gravity Line Preventive Maintenance Program should include the following components: 1) blockage abatement mechanisms (including both hydraulic and mechanical cleaning); 2) root control mechanisms; 3) debris control mechanisms, and 4) manhole preventive maintenance procedures. This program should include the following activities: 1) identification of, and provision for, all personnel and equipment needed; 2) determination of the frequency; 3) establishment of procedures; 4) establishment of priorities for scheduling; 5) the use of standard forms; 6) establishment of record keeping requirements; 7) establishment of performance measures; and 8) integration of all data collected under the program with other information management systems.

**A Continuing Sewer System Assessment Program (CSSAP).** The CSSAP should establish procedures for setting priorities and schedules for undertaking the WCTS assessment including: 1) corrosion defect identification; 2) routine manhole inspections; 3) flow monitoring; 4) CCTV activities; 5) gravity system defect analysis; 6) smoke testing, and; 7) pump station performance and adequacy analysis. The CSSAP should provide for the assessment of at least ten percent (10%) of the WCTS on average per year, resulting in the assessment of the entire WCTS at least once every ten years, and establish priorities and schedules taking into consideration the nature and extent of customer complaints; flow monitoring; location and cause of SSOs and WCTS deficiencies; any remediation work already ongoing; pump station run times; field crew work orders; any preliminary sewer assessments, such as flow monitoring results; community input; and any other relevant information.

**A Infrastructure Rehabilitation Program (IRP).** The IRP should establish procedures for setting priorities and schedules for undertaking rehabilitation of the WCTS. The IRP should address Infiltration/Inflow (I/I), structural issues in the WCTS, and the other conditions causing SSOs, with the goal of eliminating future SSOs. The IRP should take into account all previous information the City has gathered including any information gathered pursuant to the CSSAP. The IRP should also establish standard procedures to analyze the effectiveness of completed rehabilitation projects.

**A Pump Station Operations and Preventive Maintenance Program.** The Pump Station Operation and Preventive Maintenance Program should include or address the following items/components described below:

- i. Pump station operations at pump stations that are to be conducted on a routine, scheduled basis. The program should define the standard pump station operating procedures to be followed at each pump station such as reading and recording information from the elapsed time meters, recording information from the pump start counters, observing wet well conditions and grease accumulation, checking and re-setting, as necessary to improve system performance, wet well set points, checking and recording system pressure, checking SCADA components, checking alarms and stand-by power and identifying maintenance needs.
- ii. Emergency pump station operations procedures. The program should address pump station operations at pump stations that are to be conducted as a result of equipment failure or loss of electrical power. The program should define the emergency pump station operating procedures to be followed at each pump station such as calling for emergency maintenance, initiating stand-by power by bringing in portable generators or initiating portable pump operations for pump around.
- iii. The program should establish schedules, routes, priorities, standard forms and reporting procedures and establish minimum acceptable performance measures and condition grading criteria.

Preventive maintenance and inspection programs can have a significant positive impact on the future condition of the WCTS. A properly implemented preventive maintenance, inspection and rehabilitation programs can prevent a massive outlay of expenses needed to repair or replace parts of the system that City personnel 'did not see' failing due to the lack of prevention. Relatively small preventive maintenance expenses now can save the City larger repair expenses in the future. Formal guidance can also be used to educate City officials, such as the Mayor and City Council responsible for funding decisions and the allocation of resources essential to proper operation and maintenance of the utility.

**e. Sewer Overflow Response Plan**

The EPA recommends that the City update its existing SORP to include procedures for estimating SSO volumes.

**ENCLOSURE B**

**NPDES Permits Effluent Limit Exceedances**

South WWTP - MS0020117

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date
Single Event Violation	D0011 Permit Violations - Discharge Without a Valid Permit	D0011	3/15/2010	J-03/15/2010	8-08/30/2010
Effluent Violation	001 N 01119 Copper, total recoverable Effluent Gross Season ID:0 C2	E90	4/30/2009		
Effluent Violation	001 N 01119 Copper, total recoverable Effluent Gross Season ID:0 C2	E90	8/31/2009	X-09/14/2009	9-09/28/2009
Effluent Violation	001 N 00300 Oxygen, dissolved [DO] Effluent Gross Season ID:0 C1	E90	9/30/2009	X-10/22/2009	9-10/22/2009
Effluent Violation	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C2	E90	9/30/2009	T-10/31/2009	2-07/31/2010
Effluent Violation	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C3	E90	9/30/2009	X-10/22/2009	9-11/02/2009
Effluent Violation	001 N 00300 Oxygen, dissolved [DO] Effluent Gross Season ID:0 C1	E90	10/31/2009		
Effluent Violation	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C2	E90	10/31/2009	T-10/31/2009	2-07/31/2010
Effluent Violation	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C3	E90	10/31/2009		
Effluent Violation	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C2	E90	11/30/2009	T-04/30/2010	3-08/30/2010
Effluent Violation	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C3	E90	11/30/2009		
Effluent Violation	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:1 C3	E90	12/31/2009		
Effluent Violation	001 N 74055 Coliform, fecal general Effluent Gross Season ID:0 C2	E90	12/31/2009		
Effluent Violation	001 N 74055 Coliform, fecal general Effluent Gross Season ID:0 C3	E90	12/31/2009		
Effluent Violation	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C2	E90	1/31/2010	T-01/31/2010	2-07/31/2010

South WWTP - MS0020117					
Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C3	E90	1/31/2010		
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C3	E90	2/28/2010		
<u>Effluent Violation</u>	001 N 74055 Coliform, fecal general Effluent Gross Season ID:0 C2	E90	2/28/2010		
<u>Effluent Violation</u>	001 N 74055 Coliform, fecal general Effluent Gross Season ID:0 C3	E90	2/28/2010		
<u>Effluent Violation</u>	001 N 81010 BOD, 5-day, percent removal Percent Removal Season ID:0 C1	E90	2/28/2010		
<u>Effluent Violation</u>	001 N 81011 Solids, suspended percent removal Percent Removal Season ID:0 C1	E90	2/28/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:1 Q2	E90	3/31/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:1 C2	E90	3/31/2010	V-06/30/2010	3-08/30/2010
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:1 C3	E90	3/31/2010		
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C2	E90	3/31/2010	T-03/31/2010	2-07/31/2010
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C3	E90	3/31/2010		
<u>Effluent Violation</u>	001 N 74055 Coliform, fecal general Effluent Gross Season ID:0 C3	E90	3/31/2010		
<u>Effluent Violation</u>	001 N 81010 BOD, 5-day, percent removal Percent Removal Season ID:0 C1	E90	3/31/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:1 Q2	E90	4/30/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:1 C2	E90	4/30/2010	T-06/30/2010	3-08/30/2010

South WWTP - MS0020117

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:1 C3	E90	4/30/2010		
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C2	E90	4/30/2010	T-04/30/2010	2-07/31/2010
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C3	E90	4/30/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 Q2	E90	5/31/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C2	E90	5/31/2010	V-06/30/2010	3-08/30/2010
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C3	E90	5/31/2010		
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C3	E90	5/31/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 Q1	E90	6/30/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 Q2	E90	6/30/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C2	E90	6/30/2010	T-06/30/2010	5-11/26/2012
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C3	E90	6/30/2010		
<u>Effluent Violation</u>	001 N 00400 pH Effluent Gross Season ID:0 C1	E90	7/31/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 Q2	E90	7/31/2010		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C2	E90	7/31/2010	T-07/31/2010	5-11/26/2012
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C3	E90	7/31/2010		
<u>Effluent Violation</u>	001 N 01119 Copper, total recoverable Effluent Gross Season ID:0 C2	E90	6/30/2012	X-07/19/2012	9-09/05/2012

South WWTP - MS0020117

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C2	E90	6/30/2012	X-07/19/2012	9-09/05/2012
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C3	E90	6/30/2012	X-07/19/2012	9-09/05/2012
<u>Effluent Violation</u>	001 N 01119 Copper, total recoverable Effluent Gross Season ID:0 C2	E90	10/31/2012	Y-11/19/2012	9-11/26/2012
<u>Effluent Violation</u>	001 N 01119 Copper, total recoverable Effluent Gross Season ID:0 C3	E90	10/31/2012	X-11/19/2012	9-11/26/2012
<u>Effluent Violation</u>	001 N 01119 Copper, total recoverable Effluent Gross Season ID:0 C2	E90	12/31/2012	Y-01/17/2013	9-04/02/2013
<u>Effluent Violation</u>	001 N 01119 Copper, total recoverable Effluent Gross Season ID:0 C3	E90	12/31/2012	Y-01/17/2013	9-04/02/2013
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C2	E90	12/31/2012	Y-01/17/2013	9-04/02/2013
<u>Effluent Violation</u>	001 N 50060 Chlorine, total residual Effluent Gross Season ID:0 C3	E90	12/31/2012	Y-01/17/2013	9-04/02/2013
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C3	E90	9/30/2013		
<u>Effluent Violation</u>	001 N 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C2	E90	11/30/2013	X-01/15/2014	9-02/11/2014
<u>Effluent Violation</u>	101 A 50060 Chlorine, total residual Effluent Gross Season ID:0 C1	E90	12/31/2013	X-01/25/2014	9-02/14/2014

East WWTP - MS0055735			
Violation Type	Violation Information	Violation Code	Violation Date
<u>Effluent Violation</u>	001 A 01114 Lead, total recoverable Effluent Gross Season ID:0 C2	E90	9/30/2009
<u>Effluent Violation</u>	001 A 00310 BOD, 5-day, 20 deg. C Effluent Gross Season ID:0 Q2	E90	6/30/2011
<u>Effluent Violation</u>	001 A 00310 BOD, 5-day, 20 deg. C Effluent Gross Season ID:0 C3	E90	6/30/2011
<u>Effluent Violation</u>	001 A 00400 pH Effluent Gross Season ID:0 C3	E90	6/30/2011
<u>Effluent Violation</u>	001 A 00400 pH Effluent Gross Season ID:0 C3	E90	7/31/2011
<u>Effluent Violation</u>	001 A 00400 pH Effluent Gross Season ID:0 C3	E90	9/30/2011
<u>Effluent Violation</u>	001 A 00310 BOD, 5-day, 20 deg. C Effluent Gross Season ID:0 C3	E90	10/31/2011
<u>Effluent Violation</u>	001 A 00530 Solids, total suspended Effluent Gross Season ID:0 C2	E90	2/29/2012
<u>Effluent Violation</u>	001 A 81011 Solids, suspended percent removal Percent Removal Season ID:0 C1	E90	2/29/2012

## GENERAL INFORMATION

East Meridian POTW  
3900 Old Highway 45 North  
Meridian, MS  
Lauderdale County

### Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
13262	City of Meridian	Official Site Name	8/16/2007	
MS0055735	Meridian POTW, Naval Air Station Facility	Water - NPDES	9/28/1999	9/16/2004
MS0055735	Meridian POTW, Naval Air Station Facility	Water - NPDES	9/16/2004	3/31/2008
13262	Meridian POTW, Naval Air Station Facility	Historic Site Name	9/28/1999	8/16/2007
MS0055735	East Meridian POTW	Water - NPDES	3/31/2008	8/31/2009

**Basin:** Pascagoula River Basin

**Latitude:** 32° 23' 3" 3 tenths

**Longitude:** 88° 40' 0" 0 tenths

**Location Description:** CE- Center of Facility. Data collected by M. Oliver on 12/6/2004. Elevation 245 feet. Facility start-up date November 2003. Sequential Batch Reactor.

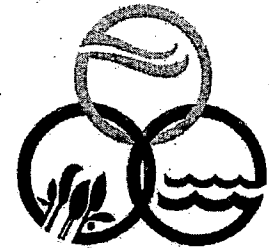
**Relevant Documents:** Form 2A, Cover Letter and a Basic Application Form

\*\*\* Draft Permit \*\*\*

Page A-1 of A-1



State of Mississippi



## WATER POLLUTION CONTROL PERMIT

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

### THIS CERTIFIES

East Meridian POTW

3900 Old Highway 45 North

Meridian, MS

Lauderdale County

has been granted permission to discharge wastewater in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit. This permit is issued in accordance with the provisions of the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402(b) of the Federal Water Pollution Control Act.

**Mississippi Environmental Quality Permit Board**

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**Mississippi Department of Environmental Quality**

Issued/Modified:

Expires:

Permit No. MS0055735

Agency Interest # 13262

\*\*\* Draft Permit \*\*\*

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FACILITY NAME AND PERMIT NUMBER:

East Meridian POTW

MS0055735

Form Approved 1/14/99  
OMB Number 2040-0088

# 13262

FORM

2A

NPDES

## NPDES FORM 2A APPLICATION OVERVIEW

## APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

## BASIC APPLICATION INFORMATION:

- A. Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.9. Treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.10.
- B. Additional Application Information for Applicants with a Design Flow  $\geq 0.1$  mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. Certification.** All applicants must complete Part C (Certification).

## SUPPLEMENTAL APPLICATION INFORMATION:

- D. Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
1. Has a design flow rate greater than or equal to 1 mgd,
  2. Is required to have a pretreatment program (or has one in place), or
  3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
1. Has a design flow rate greater than or equal to 1 mgd,
  2. Is required to have a pretreatment program (or has one in place), or
  3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
  2. Any other industrial user that:
    - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
    - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
    - c. Is designated as an SIU by the control authority.
- G. Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

## FACILITY NAME AND PERMIT NUMBER:

East Meridian POTW

MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

## PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.6 of this Basic Application Information packet.

## A.1. Facility Information.

Facility name East Meridian Wastewater Treatment Plant

Mailing Address P. O. Box 1430  
Meridian, MS 39302

Contact person Yolanda C. Brown

Title Chief Utility Plant Operator

Telephone number 601-485-1815

Facility Address 3900 Old Highway 45 North  
(not P.O. Box) Meridian, MS 39301

## A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name \_\_\_\_\_

Mailing Address \_\_\_\_\_

Contact person \_\_\_\_\_

Title \_\_\_\_\_

Telephone number \_\_\_\_\_

Is the applicant the owner or operator (or both) of the treatment works?

\_\_\_\_\_ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☒ facility \_\_\_\_\_ applicant

## A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES MS0055735 PSD \_\_\_\_\_

UIC \_\_\_\_\_ Other Sludge Permit #SW0350030431

RCRA \_\_\_\_\_ Other \_\_\_\_\_

## A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>Naval Air Station</u>	<u>3,400</u>	<u>separate</u>	<u>municipal</u>
_____	_____	_____	_____
_____	_____	_____	_____
Total population served	<u>3,400</u>		

## FACILITY NAME AND PERMIT NUMBER

East Meridian POTW

#MS0055735

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## A.5. Indian Country.

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

## A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 1.0
- mgd

(Jan - Dec) Two Years Ago 2006 Last Year 2007 This Year 2008

- b. Annual average daily flow rate:
- 0.33
- 0.25
- 0.25
- mgd

- c. Maximum daily flow rate:
- 1.25
- 1.10
- 1.51
- mgd

## A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each. (425 miles)

- ☒
- Separate sanitary sewer

100 %

- ☐
- Combined storm and sanitary sewer

%

## A.8. Discharges and Other Disposal Methods.

- a. Does the treatment works discharge effluent to waters of the U.S.?

☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

- i. Discharges of treated effluent 1
- ii. Discharges of untreated or partially treated effluent 0
- iii. Combined sewer overflow points 0
- iv. Constructed emergency overflows (prior to the headworks) 0
- v. Other: 0

1

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: \_\_\_\_\_

Annual average daily volume discharged to surface impoundment(s) \_\_\_\_\_ mgd

Is discharge \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

- c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: \_\_\_\_\_

Number of acres: \_\_\_\_\_

Annual average daily volume applied to site: \_\_\_\_\_ Mgd

Is land application \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes ☒ No

FACILITY NAME AND PERMIT NUMBER:

East Meridian POTW

#MS0055735

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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name:

Mailing Address:

Contact person:

Title:

Telephone number:

For each treatment works that receives this discharge, provide the following:

Name:

Mailing Address:

Contact person:

Title:

Telephone number:

If known, provide the NPDES permit number of the treatment works that receives this discharge.

Provide the average daily flow rate from the treatment works into the receiving facility.

mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.B.a through A.B.d above (e.g., underground percolation, well injection)?

Yes

☒ No

No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method:

Is disposal through this method ☐ continuous or ☐ intermittent?

## FACILITY NAME AND PERMIT NUMBER:

East Meridian POTW #MS0055735

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## WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

## A.9. Description of Outfall.

a. Outfall number

001

b. Location

Meridian

39301

(City or town, if applicable)

Lauderdale

(Zip Code)

(County)

MS

(State)

32 degrees 23'34.36"

(Latitude)

88 degrees 40'01.17"

(Longitude)

c. Distance from shore (if applicable)

4

ft.

d. Depth below surface (if applicable)

4

ft.

e. Average daily flow rate

0.25

mgd

f. Does this outfall have either an intermittent or a periodic discharge?

x

Yes

No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs:

156 times / yr (approx. 3 times / wk)

Average duration of each discharge:

6 hrs

Average flow per discharge:

0.64

mgd

Months in which discharge occurs:

Jan through Dec

g. Is outfall equipped with a diffuser?

Yes

wrong  
Basin

## A.10. Description of Receiving Waters.

a. Name of receiving water

Sowashee Creek

b. Name of watershed (if known)

United States Soil Conservation Service 14-digit watershed code (if known):

c. Name of State Management/River Basin (if known):

Tombigee River Basin

United States Geological Survey 8-digit hydrologic cataloging unit code (if known):

d. Critical low flow of receiving stream (if applicable):

acute \_\_\_\_\_ cfs

chronic \_\_\_\_\_ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): \_\_\_\_\_ mg/l of CaCO<sub>3</sub>

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## A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

☐ Primary
 ☒ Secondary (Activated Sludge)
 ☐ Advanced
 ☒ Other. Describe: Sequencing Batch Reactors (SBR)

b. Indicate the following removal rates (as applicable):

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal 85 %  
 Design SS removal 85 %  
 Design P removal \_\_\_\_\_ %  
 Design N removal \_\_\_\_\_ %  
 Other \_\_\_\_\_ %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

UV disinfection

If disinfection is by chlorination, is dechlorination used for this outfall?

☐ Yes ☐ No

d. Does the treatment plant have post aeration?

☒ Yes ☐ No

**A.12. Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number:

001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.5	s.u.	8.4	s.u.	12
pH (Maximum)	9.4	s.u.	8.4	s.u.	12
Flow Rate	1.06	mgd	0.77	mgd	12
Temperature (Winter) (Mar - Apr)	22.2	Celsius	17.0	Celsius	12
Temperature (Summer) (May - Aug)	30.0	Celsius	26.9	Celsius	12

\* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

## CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	5.9	mg/L	3.9	mg/L	12	5210B	0.1
	CBOD-5							
FECAL COLIFORM		1	colonies	1	colonies	12	9222D	1
TOTAL SUSPENDED SOLIDS (TSS)		26.5	mg/L	9.2	mg/L	12	2540B	0.1

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

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## BASIC APPLICATION INFORMATION

**PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).**All applicants with a design flow rate  $\geq 0.1$  mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

- B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.  
0.25 mgd approximately 50% of flow during heavy rain events

Briefly explain any steps underway or planned to minimize inflow and infiltration. None. The East Meridian POTW is a fairly new plant and pipe lines should be in good condition, we assume most of the I&I is located on the Navy Base. These are the same flow trends from 5 years ago.

- B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information: (You may submit more than one map if one map does not show the entire area.)
- The area surrounding the treatment plant, including all unit processes.
  - The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
  - Each well where wastewater from the treatment plant is injected underground.
  - Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works; and 2) listed in public record or otherwise known to the applicant.
  - Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
  - If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

- B.3. Process Flow Diagram or Schematic.** Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g. chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

**B.4. Operation/Maintenance Performed by Contractor(s).**

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Responsibilities of Contractor: \_\_\_\_\_

- B.5. Scheduled Improvements and Schedules of Implementation.** Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.  
001

- b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

Yes ☒ No

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c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM/DD/YYYY	Actual Completion MM/DD/YYYY
- Begin construction	08/01/09	/ /
- End construction	09/01/09	/ /
- Begin discharge	/ /	/ /
- Attain operational level	/ /	/ /

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☒ NoDescribe briefly: The construction (cover for holding basin) is for improvements of effluent quality. No permits are needed.**B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).**

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	0.07	mg/L	0.01	mg/L	15	4500NH3D	0.1
CHLORINE (TOTAL RESIDUAL, TRC)	0	mg/L	0	mg/L	4	4500CIG	0.02
DISSOLVED OXYGEN	10.0	mg/L	8.2	mg/L	12	4500-OG	0.01
TOTAL KJELDAHL NITROGEN (TKN)	6.58	mg/L	3.6	mg/L	3	4500NH3D	0.5
NITRATE PLUS NITRITE NITROGEN	12.10	mg/L	10.73	mg/L	3	300.0	0.1
OIL and GREASE	0	mg/L	0	mg/L	3	1664A	5.0
PHOSPHORUS (Total)	1.68	mg/L	1.54	mg/L	3	4500PB5	0.025
TOTAL DISSOLVED SOLIDS (TDS)	324	mg/L	298	mg/L	3	2540C	10
OTHER							

**END OF PART B.****REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

## FACILITY NAME AND PERMIT NUMBER:

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## BASIC APPLICATION INFORMATION

## PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☒ Part D (Expanded Effluent Testing Data)☒ Part E (Toxicity Testing: Biomonitoring Data)☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)

## ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title

John Robert Smith, Mayor

Signature

Telephone number

601-485-1926

Date signed

March 2, 2009

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:  
East Meridian POTW

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## SUPPLEMENTAL APPLICATION INFORMATION

### PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

**Effluent Testing: 1.0 mgd and Pretreatment Treatment Works.** If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

Outfall number: 100											
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Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.

## FACILITY NAME AND PERMIT NUMBER

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Outfall number: 001

(Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	0	ppb			0	ppb			3	624	20.0
ACRYLONITRILE	0	ppb			0	ppb			3	624	20.0
BENZENE	0	ppb			0	ppb			3	624	1.00
BROMOFORM	0	ppb			0	ppb			3	624	1.00
CARBON TETRACHLORIDE	0	ppb			0	ppb			3	624	1.00
CLOROBENZENE	0	ppb			0	ppb			3	624	1.00
CHLORODIBROMO-METHANE	0	ppb			0	ppb			3	624	1.00
CHLOROETHANE	0	ppb			0	ppb			3	624	1.00
2-CHLORO-ETHYL VINYL ETHER	0	ppb			0	ppb			3	624	5.00
CHLOROFORM	4.16	ppb			2.65	ppb			3	624	1.00
DICHLOROBROMO-METHANE	0	ppb			0	ppb			3	624	1.00
1,1-DICHLOROETHANE	0	ppb			0	ppb			3	624	1.00
1,2-DICHLOROETHANE	0	ppb			0	ppb			3	624	1.00
TRANS-1,2-DICHLORO-ETHYLENE	0	ppb			0	ppb			3	624	1.00
1,1-DICHLOROETHYLENE	0	ppb			0	ppb			3	624	1.00
1,2-DICHLOROPROPANE	0	ppb			0	ppb			3	624	1.00
1,3-DICHLORO-PROPYLENE	0	ppb			0	ppb			3	624	1.00
ETHYLBENZENE	0	ppb			0	ppb			3	624	1.00
METHYL BROMIDE <i>Bromo methane</i>	0				0				3		
METHYL CHLORIDE <i>Chloro methane</i>	0	ppb			0	ppb			3	624	10.00
METHYLENE CHLORIDE <i>Dichloro methane</i>	0				0				3		
1,1,2,2-TETRACHLORO-ETHANE	0	ppb			0	ppb			3	624	1.00
TETRACHLORO-ETHYLENE	0	ppb			0	ppb			3	624	1.00
TOLUENE	0	ppb			0	ppb			3	624	5.00

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Outfall number: 001

(Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE	0	ppb			0	ppb			3	624	1.00
1,1,2-TRICHLOROETHANE	0	ppb			0	ppb			3	624	1.00
TRICHLOROETHYLENE	0	ppb			0	ppb			3	624	1.00
VINYL CHLORIDE	0	ppb			0	ppb			3	624	1.00

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

bromomethane	0	ppb			0	ppb			3	624	1.00
chloromethane	0	ppb			0	ppb			3	624	1.00

## ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL	0	ppb			0	ppb			3	625	5.00
2-CHLOROPHENOL	0	ppb			0	ppb			3	625	5.00
2,4-DICHLOROPHENOL	0	ppb			0	ppb			3	625	5.00
2,4-DIMETHYLPHENOL	0	ppb			0	ppb			3	625	5.00
4,6-DINITRO-O-CRESOL	0	ppb			0	ppb			3	625	10.00
2,4-DINITROPHENOL	0	ppb			0	ppb			3	625	5.00
2-NITROPHENOL	0	ppb			0	ppb			3	625	5.00
4-NITROPHENOL	0	ppb			0	ppb			3	625	20.00
PENTACHLOROPHENOL	0	ppb			0	ppb			12	625	5.00
PHENOL	0	ppb			0	ppb			12	625	5.00
2,4,6-TRICHLOROPHENOL	0	ppb			0	ppb			3	625	5.00

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

## BASE-NEUTRAL COMPOUNDS

ACENAPHTHENE	0	ppb			0	ppb			3	625	2.00
ACENAPHTHYLENE	0	ppb			0	ppb			3	625	2.00
ANTHRACENE	0	ppb			0	ppb			3	625	2.00
BENZIDINE	0	ppb			0	ppb			3	625	20.00
BENZO(A)ANTHRACENE	0	ppb			0	ppb			3	625	2.00

BENZO(A)PYRENE	0	ppb			0	ppb				625	2.00
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Outfall number: 001

(Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE	0	ppb			0	ppb			3	625	2.00
BENZO(GH)PERYLENE	0	ppb			0	ppb			3	625	2.00
BENZO(K)FLUORANTHENE	0	ppb			0	ppb			3	625	2.00
BIS (2-CHLOROETHOXY) METHANE	0	ppb			0	ppb			3	625	5.00
BIS (2-CHLOROETHYL)-ETHER	0	ppb			0	ppb			3	625	5.00
BIS (2-CHLOROISO-PROPYL) ETHER	0	ppb			0	ppb			3	625	5.00
BIS (2-ETHYLHEXYL) PHTHALATE	0	ppb			0	ppb			3	625	10.00
4-BROMOPHENYL PHENYL ETHER	0	ppb			0	ppb			3	625	5.00
BUTYL BENZYL PHTHALATE	0	ppb			0	ppb			3	625	5.00
2-CHLORONAPHTHALENE	0	ppb			0	ppb			3	625	5.00
4-CHLORPHENYL PHENYL ETHER	0	ppb			0	ppb			3	625	5.00
CHRYSENE	0	ppb			0	ppb			3	625	2.00
DI-N-BUTYL PHTHALATE	0	ppb			0	ppb			3	625	5.00
DI-N-OCTYL PHTHALATE	0	ppb			0	ppb			3	625	5.00
DIBENZO(A,H) ANTHRACENE	0	ppb			0	ppb			3	625	2.00
1,2-DICHLOROBENZENE	0	ppb			0	ppb			3	625	5.00
1,3-DICHLOROBENZENE	0	ppb			0	ppb			3	625	5.00
1,4-DICHLOROBENZENE	0	ppb			0	ppb			3	625	5.00
3,3-DICHLOROBENZIDINE	0	ppb			0	ppb			3	625	10.00
DIETHYL PHTHALATE	0	ppb			0	ppb			3	625	5.00
DIMETHYL PHTHALATE	0	ppb			0	ppb			3	625	5.00
2,4-DINITROTOLUENE	0	ppb			0	ppb			3	625	5.00
2,6-DINITROTOLUENE	0	ppb			0	ppb			3	625	5.00

1,2-DIPHENYLHYDRAZINE	0	ppb			0	ppb			3	625	5.00
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Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	0	ppb			0	ppb			3	625	2.00
FLUORENE	0	ppb			0	ppb			3	625	2.00
HEXACHLOROBENZENE	0	ppb			0	ppb			3	625	5.00
HEXACHLOROBUTADIENE	0	ppb			0	ppb			3	625	5.00
HEXACHLOROCYCLO-PENTADIENE	0	ppb			0	ppb			3	625	5.00
HEXACHLOROETHANE	0	ppb			0	ppb			3	625	5.00
INDENO(1,2,3-CD)PYRENE	0	ppb			0	ppb			3	625	2.00
ISOPHORONE	0	ppb			0	ppb			3	625	5.00
NAPHTHALENE	0	ppb			0	ppb			3	625	2.00
NITROBENZENE	0	ppb			0	ppb			3	625	5.00
N-NITROSODI-N-PROPYLAMINE	0	ppb			0	ppb			3	625	5.00
N-NITROSODI-METHYLAMINE	0	ppb			0	ppb			3	625	5.00
N-NITROSODI-PHENYLAMINE	0	ppb			0	ppb			3	625	10.00
PHENANTHRENE	0	ppb			0	ppb			3	625	2.00
PYRENE	0	ppb			0	ppb			3	625	2.00
1,2,4-TRICHLOROBENZENE	0	ppb			0	ppb			3	625	5.00

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

END OF PART D.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

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15 of 21 1st qrt results

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## SUPPLEMENTAL APPLICATION INFORMATION

## PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 103); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity; and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QAGC requirements of 40 CFR Part 136 and other appropriate QAGC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

## E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years:

X chronic        acute

E.2. Individual Test Data: Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number 1a

Test number 1b

Test number:

## a. Test information.

Test species & test method number	Ceriodaphnia dubia	Pimephales promelas	1000.0
Age at initiation of test	53 hours	53 hours	
Outfall number	001	001	
Dates sample collected	4/14, 4/16, 4/18	4/14, 4/16, 4/18/08	
Date test started	4/16/08	4/16/08	
Duration	5 days, 22 hours	7 days	

## b. Give toxicity test methods followed.

Manual title	EPA Acute / Chronic Manual EPA 821-R-02-012	
Edition number and year of publication	Fifth Edition, October 2002	
Page number(s)	n/a	

## c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite 6hr comp			
Grab			

## d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection	X	X	
After dechlorination			

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East Meridian

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OMB Number 2040-0086Test number: 1aTest number: 1b

Test number: \_\_\_\_\_

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

In effluent discharge channel, after UV  
disinfection, before discharge to creek

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

x

x

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

x

x

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

Laboratory Control water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Diluted mineral water w/20% Perrier in Nanopure

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

0, 6.25, 12.50,  
25, 50, 1000, 6.25, 12.50,  
25, 50, 100

k. Parameters measured during the test. (State whether parameter meets test method specifications) yes

pH

7.4 - 9.3

7.3 - 9.3

Salinity

Temperature

23 - 25°C

23 - 25°C

Ammonia

Dissolved oxygen

7.9 - 9.7 mg/L

4.9 - 9.7 mg/L

l. Test Results.

Acute:

Percent survival in 100%  
effluent

%

%

%

LC50

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

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## Chronic:

NOEC	%	%	%
IC <sub>25</sub>	> 100%	> 100%	%
Control percent survival	%	%	%
Other (describe)			%

## m. Quality Control/Quality Assurance.

Is reference toxicant data available?	yes	yes	
Was reference toxicant test within acceptable bounds?	yes	yes	
What date was reference toxicant test run (MM/DD/YYYY)?	date of test (rec'd)	date of test (rec'd)	
Other (describe)			

## E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

☐ Yes ☒ No

If yes, describe:

## E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER

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2nd qtr results

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## SUPPLEMENTAL APPLICATION INFORMATION

## PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

## E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

☒ chronic ☐ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 2a

Test number: 2b

Test number:

## a. Test information.

Test species & test method number	Ceriodaphnia dubia	Pimephales promelas	1000.0
Age at initiation of test	29 hours	28 hours	
Outfall number	001	001	
Dates sample collected	6/2, 6/4, 6/6/08	6/2, 6/4, 6/6/08	
Date test started	6/3/08	6/3/08	
Duration	6 days, 23 hours	7 days	

## b. Give toxicity test methods followed.

Manual title	EPA Acute / Chronic Manual EPA 821-R-02-012	
Edition number and year of publication	Fifth Edition, October 2002	
Page number(s)	n/a	

## c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite 6hr comp			
Grab			

## d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
After dechlorination			

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Test number: 2a

Test number: 2b

Test number:

a. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

In effluent discharge channel, after UV  
disinfection, before discharge to creek

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

x

x

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

x

x

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

Laboratory control water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Dilute mineral water made w/ 20% Perrier in Nanopure

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

0, 6.25, 12.50,  
25, 50, 1000, 6.25, 12.50,  
25, 50, 100

k. Parameters measured during the test. (State whether parameter meets test method specifications) yes

pH

7.9 - 8.9

7.8 - 8.9

Salinity

Temperature

23 - 25°C

23 - 25°C

Ammonia

Dissolved oxygen

7.2 - 9.4 mg/L

6.8 - 9.4 mg/L

l. Test Results.

Acute:

Percent survival in 100%  
effluent

%

%

%

LC50

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

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Chronic:

NOEC	%	%	%
IC <sub>25</sub>	> 100%	> 100%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?	yes	yes	
Was reference toxicant test within acceptable bounds?	yes	yes	
What date was reference toxicant test run (MM/DD/YYYY)?	date of test	date of test	
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

☐ Yes ☒ No

If yes, describe:

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

## SUPPLEMENTAL APPLICATION INFORMATION

## PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

## E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years:

☒ chronic ☐ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the past four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 3a

Test number: 3b

Test number: \_\_\_\_\_

## a. Test information.

Test species & test method number	Ceriodaphnia dubia	Pimephales promelas	1000.0
Age at initiation of test	28 hours	28 hours	
Outfall number	001	001	
Dates sample collected	9/22, 9/24, 9/26/08	9/22, 9/24, 9/26/08	
Date test started	9/23/08	9/23/08	
Duration	6 days	7 days	

## b. Give toxicity test methods followed.

Manual title	EPA Acute / Chronic Manual EPA 821-R-02-012	
Edition number and year of publication	Fifth Edition, October 2002	
Page number(s)	n/a	

## c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite 6hr comp			
Grab			

## d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
After dechlorination			

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Test number: 3a

Test number: 3b

Test number: \_\_\_\_\_

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

In effluent discharge channel, after UV  
disinfection, before discharge to creek

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

x

x

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

x

x

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

Laboratory control water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Dilute mineral water made with 20% Perrier in Nanopure

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

0, 6.25, 12.50,  
25, 50, 1000, 6.25, 12.50,  
25, 50, 100

k. Parameters measured during the test. (State whether parameter meets test method specifications) yes

pH

8.1 - 9.1

7.8 - 9.1

Salinity

Temperature

23 - 24°C

23°C

Ammonia

Dissolved oxygen

7.6 - 9.7 mg/L

7.2 - 9.1 mg/L

l. Test Results.

Acute:

Percent survival in 100%  
effluent

%

%

%

LC50

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

## FACILITY NAME AND PERMIT NUMBER

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## Chronic:

NOEC	%	%	%
IC <sub>25</sub>	> 100%	> 100%	%
Control percent survival	%	%	%
Other (describe)			

## m. Quality Control/Quality Assurance.

Is reference toxicant data available?	yes	yes	
Was reference toxicant test within acceptable bounds?	yes	yes	
What date was reference toxicant test run (MM/DD/YYYY)?	date of test	date of test	
Other (describe)			

## E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

☐ Yes ☒ No

If yes, describe:

## E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.  
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER

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4th qtr results

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OMB Number: 2040-0060

## SUPPLEMENTAL APPLICATION INFORMATION

## PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

## E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

☒ chronic ☐ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 4a

Test number: 4b

Test number: \_\_\_\_\_

## a. Test information.

Test species & test method number	Ceriodaphnia dubia	Pimephales promelas	1000.0
Age at initiation of test	28 hours	28 hours	
Outfall number	001	001	
Dates sample collected	12/1, 12/3, 12/5/08	12/1, 12/3, 12/5/08	
Date test started	12/2/08	12/2/08	
Duration	7 days	7 days	

## b. Give toxicity test methods followed.

Manual title	EPA Acute / Chronic Manual EPA 821-R-02-012	
Edition number and year of publication	Fifth Edition, October 2002	
Page number(s)	n/a	

## c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite 6hr comp			
Grab			

## d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection	X	X	
After dechlorination			

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Test number: 4a

Test number: 4b

Test number: \_\_\_\_\_

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

In effluent discharge channel, after UV  
disinfection, before discharge to creek

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

x

x

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

x

x

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

laboratory control water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

dilute mineral water made with 20% Perrier in Nanopure

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

0, 6.25, 12.50,  
25, 50, 1000, 6.25, 12.50,  
25, 50, 100

k. Parameters measured during the test. (State whether parameter meets test method specifications)

yes

pH

8.0 - 8.6

7.8 - 8.4

Salinity

Temperature

23°C

23°C

Ammonia

Dissolved oxygen

7.8 - 10.1 mg/L

6.7 - 10.1 mg/L

l. Test Results.

Acute:

Percent survival in 100%  
effluent

%

%

%

LC<sub>50</sub>

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

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Chronic:

NOEC	%	%	%
IC <sub>25</sub>	> 100%	> 100%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance

Is reference toxicant data available?	yes	yes	
Was reference toxicant test within acceptable bounds?	yes	yes	
What date was reference toxicant test run (MM/DD/YYYY)?	date of test	date of test	
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes ☒ No

If yes, describe:

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

## FACILITY NAME AND PERMIT NUMBER:

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## SUPPLEMENTAL APPLICATION INFORMATION

## PART F INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

## GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

☐ Yes ☐ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs.

b. Number of CIUs.

## SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.6 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name:

Mailing Address:

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s):

Raw material(s):

## F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

 gpd ( ☐ continuous or ☐ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

 gpd ( ☐ continuous or ☐ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ☐ Yes ☐ Nob. Categorical pretreatment standards ☐ Yes ☐ No

If subject to categorical pretreatment standards, which category and subcategory?

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**F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

☐ Yes ☐ No

If yes, describe each episode.

**RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:**

**F.9. RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?  
☐ Yes ☐ No (go to F.12.)

**F.10. Waste Transport.** Method by which RCRA waste is received (check all that apply):

☐ Truck

☐ Rail

☐ Dedicated Pipe

**F.11. Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number

Amount

Units

**CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:**

**F.12. Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.)

☐ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

**F.13. Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA or other remedial waste originates (or is expected to originate in the next five years).

**F.14. Pollutants.** List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

**F.15. Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous

☐ Intermittent

If intermittent, describe discharge schedule.

**END OF PART F.**

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

## FACILITY NAME AND PERMIT NUMBER:

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## SUPPLEMENTAL APPLICATION INFORMATION

## PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

## CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

- Outfall number \_\_\_\_\_
- Location \_\_\_\_\_  
(City or town, if applicable) (Zip Code) \_\_\_\_\_  
(County) (State) \_\_\_\_\_  
(Latitude) (Longitude) \_\_\_\_\_
- Distance from shore (if applicable) \_\_\_\_\_ ft.
- Depth below surface (if applicable) \_\_\_\_\_ ft.
- Which of the following were monitored during the last year for this CSO?  
\_\_\_\_ Rainfall \_\_\_\_\_ CSO pollutant concentrations \_\_\_\_\_ CSO frequency  
\_\_\_\_ CSO flow volume \_\_\_\_\_ Receiving water quality
- How many storm events were monitored during the last year? \_\_\_\_\_

## G.4. CSO Events.

- Give the number of CSO events in the last year.  
\_\_\_\_\_ events (\_\_\_\_ actual or \_\_\_\_ approx.)
- Give the average duration per CSO event.  
\_\_\_\_\_ hours (\_\_\_\_ actual or \_\_\_\_ approx.)

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c. Give the average volume per CSO event.

\_\_\_\_\_ million gallons (\_\_\_\_\_ actual or \_\_\_\_\_ approx.)

d. Give the minimum rainfall that caused a CSO event in the last year.

\_\_\_\_\_ inches of rainfall

**G.5: Description of Receiving Waters.**

a. Name of receiving water: \_\_\_\_\_

b. Name of watershed/river/stream system: \_\_\_\_\_

United States Soil Conservation Service 14-digit watershed code (if known): \_\_\_\_\_

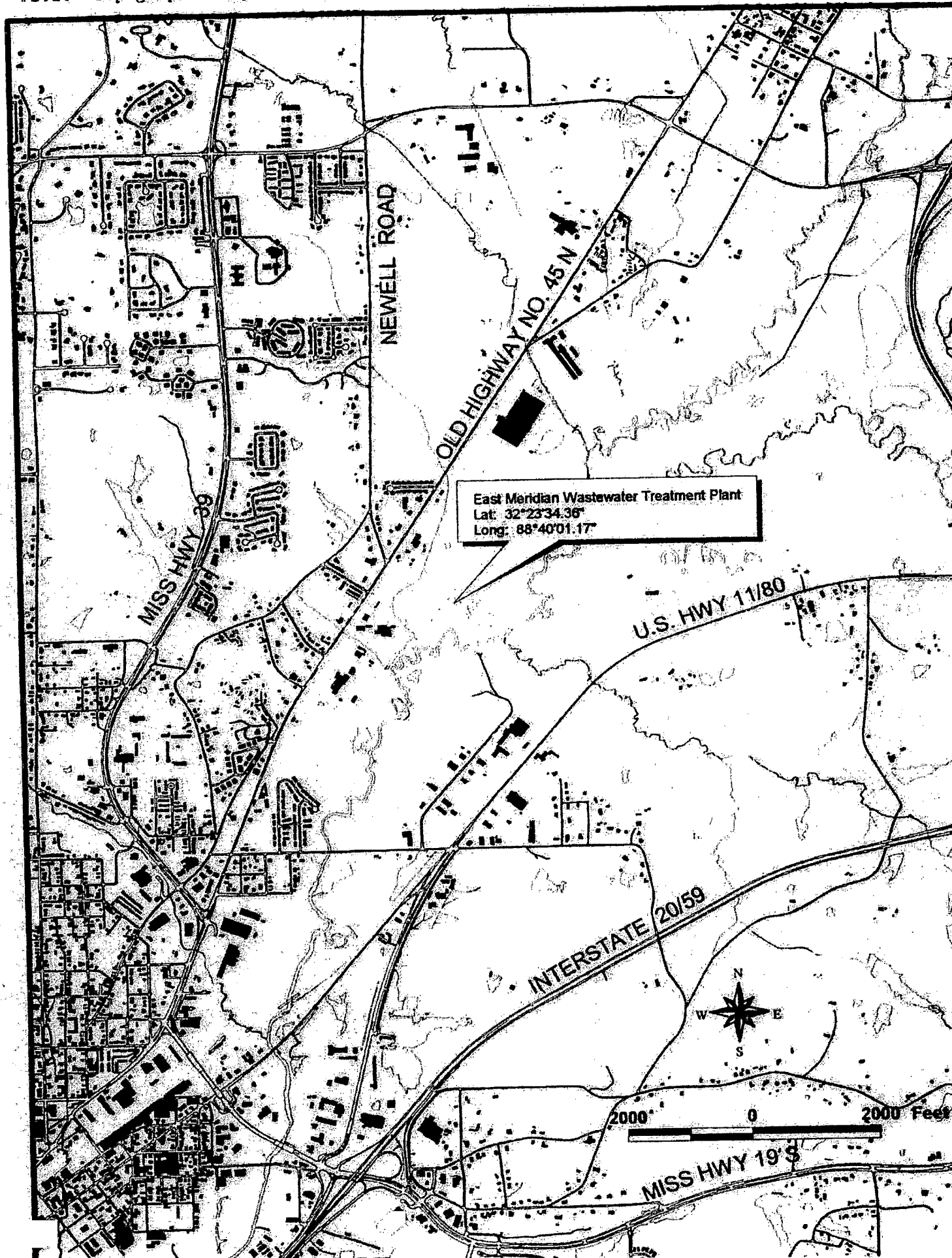
c. Name of State Management/River Basin: \_\_\_\_\_

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): \_\_\_\_\_

**G.6: CSO Operations.**

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

\_\_\_\_\_  
\_\_\_\_\_**END OF PART G.****REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.**



### **#B.3. Process flow description – East Meridian POTW**

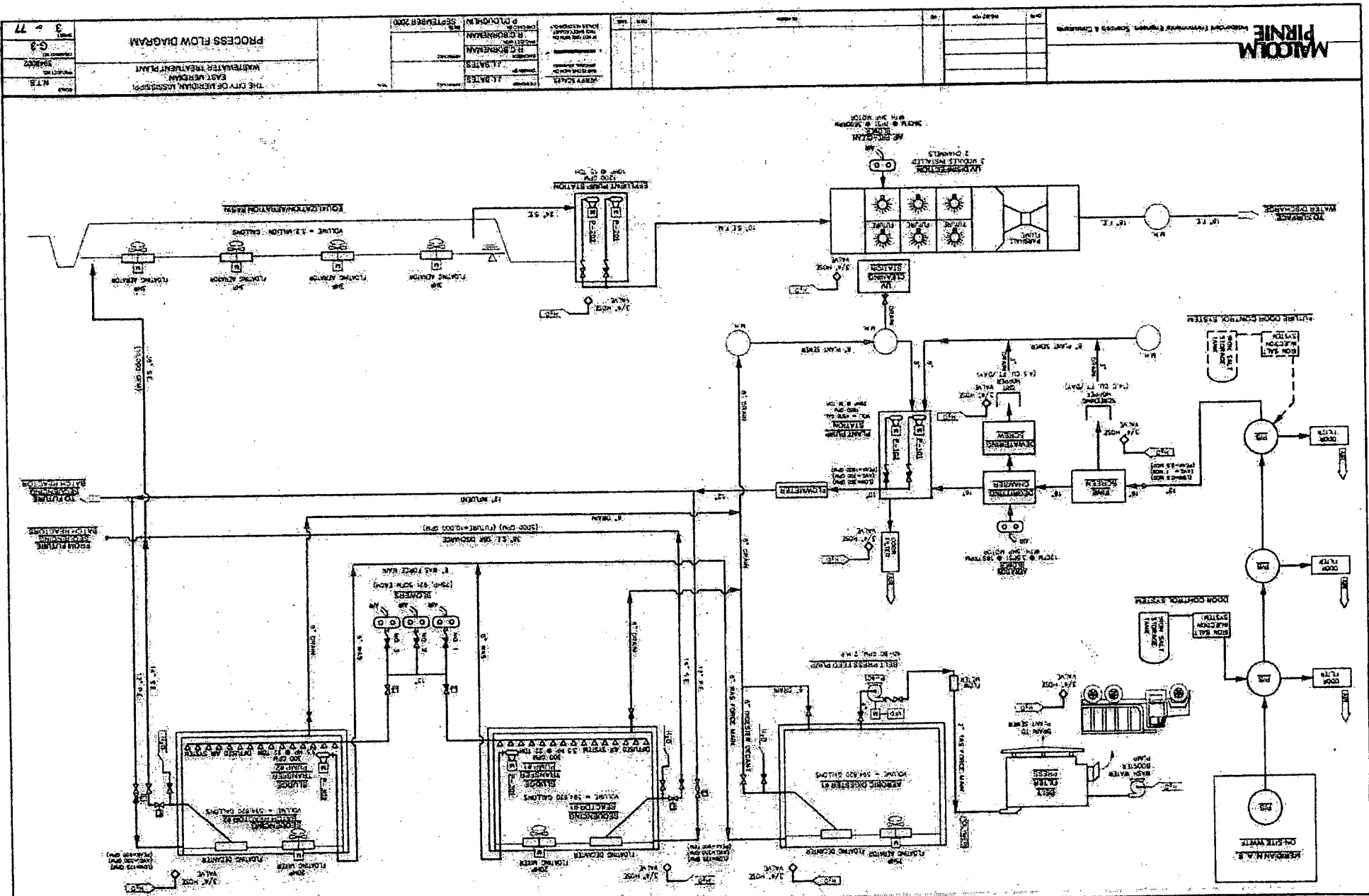
The East Meridian POTW treats waste from the Naval Air Station. There are 3 pump stations (P/S) between the Navy Base and the treatment plant. The last lift station has a chemical fed odor control.

The flow enters the head works of the East Meridian POTW and goes through the fine screen and degritting chamber, which removes paper, trash, grit, etc. The wastewater goes to the influent pump station, and the trash goes to the land fill.

The wastewater is pumped to two sequencing batch reactors in alternating cycles, where the entire treatment process occurs. After decant cycle, the water (supernate) from each reactor is pumped to an aerated equalization basin, and the sludge from the reactor goes to the digester.

Because the flow rate is very low, the effluent is collected in the basin and discharged every two or three days. When discharging, the water is pumped to the effluent pump station; it goes through 3 modules of UV disinfection and then discharged to Sowashee Creek.

The sludge from the reactors goes to an aerobic digester for further bacteria stabilization. The sludge is pumped to the belt filter press approximately once a month and then taken to the land farm.



## BASIC REVIEW CHECKLIST

NPDES Number \_\_\_\_\_

State Contact (Name & Phone #) \_\_\_\_\_

Facility Name \_\_\_\_\_

Section 1 Basic Review Preliminary Screen		Yes	No	Comments
<i>(Unless specifically requested otherwise, EPA will be reviewing permits listed on the Priority Permit list: majors, minor primaries, CAFOs, Power Plants, Pulp and Paper, and permits requested by Enforcement/Others for review)</i>				
<b>NPDES Permit Review</b>	Is this permit a major facility (or should be)?			
	Is this permit a minor primary industrial facility?			
	Is this permit listed on the Priority Permit List?			Use flowchart "WHAT TYPE OF REVIEW WILL BE GIVEN TO A FACILITY" to determine level of review.
	Is this a new or expanding facility?			
	Has a map been prepared to show any downstream impairment?			If yes, include map.

Section 2 Basic Review Review of Impairment  <i>(List all pollutants of concern that might be discharged by the facility that are going to impaired streams. If not applicable, list as "N/A.")</i>	TMDL?		Adequate permit condition?		Comments  <i>(Note whether permit has included the appropriate implementation of the TMDL via limit or other condition. Where TMDL has not been developed/approved for that pollutant, note whether adequate permit condition exists such as monitoring, limits, or other conditions have been applied based on EPA's 1999 policy and other supplemental State policies.)</i>
	Yes	No	Yes	No	

Detailed Review	Yes	No	Comments
Is Detailed Review needed?			If yes, complete Detailed Review Checklist and attach to the Basic Review Checklist.

ACTION	RESPONSE <i>Included hard copy in file</i>		Comments
<i>Complete Basic Review and Detailed Review (as needed) and note action taken. Be sure to update tracking system.</i>	Sent email (date)	Sent letter (date)	
Waived			
No Comment			
Comments			
Interim Objection	XXXXXX		
Objection	XXXXXX		
			Sign & Date

Please attach this form on front of your new file.

Margret, this is a NEW file that needs a bar code assigned and entered into the system.

Please create a file with the following information:

File I. D. # MS0061751

File Description MS Power Co., Kemper IGCC Facility

Series # 205B (Example: 0232A)

☒ No other volumes for this number.

☐ There are other volumes for this number.

File Creation Date: M 10 D 31 Y 13

Recipient GS. ext. \_\_\_\_\_

TOTAL  
COPY

NOTES

NO AGREED ORDER (set 13)

PLEASE COPY FOR THE R4  
FREEDOM OF INFORMATION OFFICE

Need coal feed  
recycling code  
in individual  
permit  
= 50 as/l

MS0061751

PERMIT RATIONALE FOR REISSUANCE  
Mississippi Power Company, Kemper IGCC Facility  
Kemper County  
DeKalb, Mississippi  
Water NPDES No. MS0061751  
September 24, 2013

245.7  
or  
2008

I. FACILITY INFORMATION

Facility Name: Mississippi Power Company, Kemper IGCC Facility  
Facility Address: 5835 Highway 493  
DeKalb, MS 39573

will  
be blown  
in  
washed?  
e address

Permit No.: MS0061751  
SIC: 4911  
Permit Writer: Permit Manager  
EPD Branch: Energy and Transportation Branch

not  
with

II. NATURE OF BUSINESS

Mississippi Power will generate electric power utilizing the Integrated Gasification Combined Cycle (IGCC) technology with a low ranking coal (lignite) as fuel.

PA

1/10  
RWB

III. EFFLUENT AND RECEIVING STREAM FLOW DATA

Outfall 001 (External) – The cooling water makeup reservoir is designed to contain a 100-yr, 24-hr rainfall event and safely pass up to 100% of the Probable Maximum Precipitation (PMP) (or 44").

Outfall 101 (Internal) – Sanitary waste water package plant. Normal operation will include the Outfall 101 effluent being recycled and reused in the process. Outfall 101 effluent will be redirected to the cooling water makeup reservoir when the generating units are not operating.

Outfall 003 (External) – The Ash Management Unit (AMU) #1 storm water runoff sedimentation pond is designed to contain the 100-yr, 24-hr rainfall event, while safely passing 35% of the PMP (or 15.4").

The proposed discharge limits will be based on a wet weather flow where the:

$$IWC = 39.2 \% = Q_w / (Q_w + Q_r) \text{ where } Q_w = Q_{001} + Q_{003}$$

IV. 303(d) ISSUES

None.

**V. TYPE OF WASTEWATER TREATMENT:**

Outfall 001 (External) – Overflow from the cooling water makeup reservoir.

Outfall 101 (Internal) – Sanitary waste water package plant. Normal operation will include the Outfall 101 effluent being recycled and reused in the process. Outfall 101 effluent will be redirected to the cooling water makeup reservoir when the generating units are not operating.

Outfall 003 (External) – Ash Management Unit (AMU) #1 storm water runoff sedimentation pond overflow. This is currently regulated under the State Operating Permit (SOP) MSU009005. SOP MSU009005 will be terminated simultaneously if and when NPDES MS0061751 is issued.

**VI. EPA APPLICABLE CATEGORICAL GUIDELINES**

40 CFR 423 – Steam Electric Generation Category. The facility is designed to have no discharge of process waste water with the exception of the storm water runoff for the coal pile storage area. The coal pile runoff sedimentation basin was identified in the notice of intent submitted separately for coverage under the Baseline NPDES Storm Water General Permit MSR00 and will be considered as part of the BNOI submittal package under a separate permit action.

**VII. DATA FROM APPLICATION FORMS 2D and 2E**

Outfall 001 (External)	
Parameter	Maximum Daily Value
BOD	18 mg/L
COD	37 mg/L
TSS	29 mg/L
Ammonia	6.1 mg/L
pH	7 – 8 S.U.
Oil & Grease	15 mg/L
Aluminum	0.91 mg/L
Iron	1.34 mg/L
Magnesium	4.27 mg/L
Manganese	0.16 mg/L
Titanium	0.007 mg/L
Nickel	0.002 mg/L
Zinc	0.023 mg/L
Selenium	0.004 mg/L

Outfall 101 (Internal)	
Parameter	Maximum Daily Value
BOD	30 mg/L
TSS	30 mg/L
Fecal Coliform	< 100 #/ 100 mL
Oil & Grease	1.0 mg/L
Ammonia as N	0.75 mg/L
pH	7 – 8 S.U.

Outfall 003 (External)	
Parameter	Maximum Daily Value
TSS	5 mg/L
pH	7 – 9 S.U.
Arsenic	0.043 mg/L
Cadmium	0.0071 mg/L
Lead	0.102 mg/L
Mercury	0.00056 mg/L
Nickel	0.14 mg/L
Selenium	0.006 mg/L
Zinc	0.027 mg/L

## VII. WATER QUALITY LIMITATIONS BASED ON WASTELOAD ALLOCATION

The waste load allocation utilizes an IWC = 39.2 % and addresses conventional pollutants and ammonia. Other toxic parameters will be addressed in the WQ screening later in this document.

Outfall 001 (External)	
Parameter	Average
Flow	12.5 MGD
CBOD <sub>5</sub>	30 mg/L
Dissolved Oxygen (DO)	6 mg/L (minimum)
TSS	30 mg/L
pH	6 – 9 S.U.
Ammonia as N	6 mg/L

## IX. CATEGORICAL GUIDELINE LIMITATIONS CALCULATIONS

Not applicable for the discharges proposed in NPDES permit number MS0061751.

## X. TOXICITY SCREENING

No receiving stream background pollutant concentrations were provided for the proposed discharges. The proposed basins will be designed, constructed, and operated to capture and contain the storm water runoff from the 100-yr, 24-hr storm event while safely discharging a specific percentage of the PMP.

An allowable in stream concentration will be utilized to screen the proposed discharge quality included in the NPDES applications (IWC = 39.2 %).

Parameter	Screening Allowable Maximum Daily Value	Application Data Outfall 001	Application Data Outfall 003	Pass/Fail Outfall 001	Pass/Fail Outfall 003
Arsenic <sup>1</sup>	0.867 mg/L	N/A	0.043 mg/L	N/A	pass
Cadmium <sup>1</sup>	0.003 mg/L	N/A	0.0071 mg/L	N/A	fail
Lead <sup>1</sup>	0.077 mg/L	N/A	0.102 mg/L	N/A	fail
Mercury <sup>1</sup>	0.005 mg/L	N/A	0.00056 mg/L	N/A	pass
Aluminum <sup>2</sup>	1.913 mg/L	0.91 mg/L	N/A	pass	N/A
Iron <sup>2</sup>	2.551 mg/L	1.34 mg/L	N/A	pass	N/A
Nickel <sup>1</sup>	0.663 mg/L	0.002 mg/L	0.14 mg/L	pass	pass
Zinc <sup>1</sup>	0.166 mg/L	0.023 mg/L	0.027 mg/L	pass	pass
Selenium <sup>1</sup>	0.030 mg/L	0.005 mg/L	0.006 mg/L	pass	pass

Footnote<sup>1</sup>: WPC-2

Footnote<sup>2</sup>: National Recommended Water Quality Criteria

<http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm>

## XI. PROPOSED FINAL LIMITATIONS

### Outfall 001

#### 1. Average Permit Limitations

Parameter	Categorical Limitation	Water Quality Limitation	Proposed Permit Limitation	Basis
Flow	N/A	N/A	12.5 MGD	WLA
pH	N/A	6.0 SU (min)	6.0 SU (min)	WQ
TSS	N/A	N/A	30 mg/L	WLA
Ammonia as N	N/A	N/A	4.0 mg/L	TJ
D.O.	N/A	N/A	6.0 mg/L (min)	WLA
CBOD <sub>5</sub>	N/A	N/A	30 mg/L	WLA

#### 2. Maximum Permit Limitations

Parameter	Categorical Limitation	Water Quality Limitation	Proposed Permit Limitation	Basis
Flow	N/A	N/A	Report MGD	TJ
pH	N/A	9.0 SU	9.0 SU	WQ
TSS	N/A	N/A	45 mg/L	WLA
Ammonia as N	N/A	N/A	6.0 mg/L	TJ
D.O.	N/A	N/A	N/A	N/A
CBOD <sub>5</sub>	N/A	N/A	45 mg/L	WLA

## Outfall 101

### 1. Average Permit Limitations

Parameter	Categorical Limitation	Water Quality Limitation	Proposed Permit Limitation	Basis
Flow	N/A	N/A	N/A	TJ
CBOD <sub>5</sub>	N/A	N/A	30 mg/L	TJ
TSS	N/A	N/A	30 mg/L	TJ
TRC	N/A	N/A	0.1 mg/L (min)	TJ

### 2. Maximum Permit Limitations

Parameter	Categorical Limitation	Water Quality Limitation	Proposed Permit Limitation	Basis
Flow	N/A	N/A	Report MGD	TJ
CBOD <sub>5</sub>	N/A	N/A	45 mg/L	TJ
TSS	N/A	N/A	45 mg/L	TJ
TRC	N/A	N/A	1.0 mg/L	TJ

## Outfall 003

### 1. Average Permit Limitations

Parameter	Categorical Limitation	Water Quality Limitation	Proposed Permit Limitation	Basis
Flow	N/A	N/A	Report MGD	TJ
pH	N/A	6.0 SU (min)	6.0 SU (min)	WQ
TSS	N/A	N/A	30 mg/L	WLA
Lead	N/A	N/A	Report mg/L	TJ
Cadmium	N/A	N/A	Report mg/L	TJ

### 2. Maximum Permit Limitations

Parameter	Categorical Limitation	Water Quality Limitation	Proposed Permit Limitation	Basis
Flow	N/A	N/A	Report MGD	TJ
pH	N/A	9.0 SU	9.0 SU	WQ
TSS	N/A	N/A	45 mg/L	WLA
Lead	N/A	0.077 mg/L	0.077 mg/L	WQ
Cadmium	N/A	0.003 mg/L	0.003 mg/L	WQ

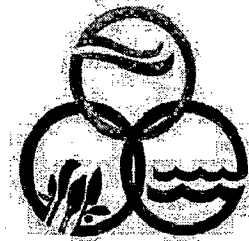
A completed Form 2C will be required to be submitted within 18 months of the issuance of NPDES Permit MS0061751 for both Outfalls 001 and 003. A new Reasonable Potential Analysis (RPA) will be performed upon receipt of the completed Form 2C.

## XII. TECHNICAL JUDGMENT STATEMENT:

It is our Technical Judgment that the foregoing limitations represent all applicable state and federal requirements.



**State of Mississippi**



**WATER POLLUTION CONTROL PERMIT**

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

**THIS CERTIFIES**

**Mississippi Power Company, Kemper IGCC Facility  
5835 Highway 493  
DeKalb, MS  
Kemper County**

has been granted permission to discharge wastewater in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit. This permit is issued in accordance with the provisions of the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402(b) of the Federal Water Pollution Control Act.

**Mississippi Environmental Quality Permit Board**

---

**Mississippi Department of Environmental Quality**

**Issued/Modified:**

**Expires:**

**Permit No. MS0061751**

**Agency Interest # 36313**

**\*\*\* Draft Permit \*\*\***

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Other Relevant Documents:	
Cover Letter, Form 1, Form 2-D, Drawings	

# **Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Subject Item Inventory

Permit Number MS0061751

Activity ID No.: PER20110001

## **Subject Item Inventory:**

ID	Designation	Description
AI36313	36313	IGCC Steam Electric
RPNT2	MS0061751-001	Outfall 001 (External - Cooling Water Make Up Reservoir Discharge)
RPNT3	MS0061751-101	Outfall 101 (Internal - Sanitary Waste Water Discharge)
RPNT21	MS0061751-003	Outfall 003 (External - Ash Management Unit Storm Water Runoff Pond Discharge)

## **Receiving Stream Relationships:**

Subject Item	Relationship	Receiving Stream
AI 36313 IGCC Steam Electric	Discharges Into	Wetland Adjacent to
	Then Into	Okatibbee Creek
	Then Into	Okatibbee Creek
	Then Into	Chickasawhay River
RPNT2 Outfall 001 (External - Cooling Water Make Up Reservoir Discharge)	Discharges Into	Chickasawhay Creek
RPNT21 Outfall 003 (External - Ash Management Unit Storm Water Runoff Pond Discharge)	Discharges Into	Chickasawhay Creek
RPNT3 Outfall 101 (Internal - Sanitary Waste Water Discharge)	Discharges Into	Chickasawhay Creek

### **KEY**

ACT = Activity

AREA = Area

CONT = Control Device

IA = Insignificant Activity

PCS = PCS

TRMT = Treatment

AI = Agency Interest

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

MAFO = Animal Feeding Operation

RPNT = Release Point

WDPT = Withdrawal Point

\*\*\* Draft Permit \*\*\*

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Subject Item Inventory

Permit Number MS0061751

Activity ID No.: PER20110001

**KEY**

WDPT = Withdrawal Point

\*\*\* Draft Permit \*\*\*

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item: Outfall 001 (External - Cooling Water Make Up Reservoir Discharge)**

**RPNT0000000002: MS0061751-001**

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Ammonia Nitrogen, Total (as N) Effluent</i>	Report Quarterly Average	Report Quarterly Maximum	pounds per day	*****	4.0 Quarterly Average	6.0 Quarterly Maximum	mg/L	Monthly When Discharging	Grab Sampling	Jan-Dec
<i>Flow Effluent</i>	12.5 Quarterly Average	Report Quarterly Maximum	Million Gallons per Day	*****	*****	*****	*****	Daily When Discharging	Measurement	Jan-Dec
<i>Oxygen Demand, carbonaceous biochemical, 5-day (20 degrees C) Effluent</i>	Report Quarterly Average	Report Quarterly Maximum	pounds per day	*****	30 Quarterly Average	45 Quarterly Maximum	mg/L	Monthly When Discharging	Grab Sampling	Jan-Dec
<i>Oxygen, dissolved Effluent</i>	*****	*****	*****	6.0 Minimum	*****	*****	mg/L	Daily When Discharging	Grab Sampling	Jan-Dec
<i>pH Effluent</i>	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	Daily When Discharging	Grab Sampling	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	Report Quarterly Average	Report Quarterly Maximum	pounds per day	*****	30 Quarterly Average	45 Quarterly Maximum	mg/L	Monthly When Discharging	Grab Sampling	Jan-Dec

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item: Outfall 101 (Internal - Sanitary Waste Water Discharge)**

**RPNT0000000003: MS0061751-101**

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Chlorine, total residual Effluent</i>	*****	*****	*****	0.1 Minimum	*****	1.0 Maximum	mg/L	Weekly	Grab Sampling	Jan-Dec
<i>Flow Effluent</i>	*****	Report Quarterly Maximum	Million Gallons per Day	*****	*****	*****	*****	Daily	Measurement	Jan-Dec
<i>Oxygen Demand, carbonaceo us biochemical, 5-day (20 degrees C) Effluent</i>	*****	*****	*****	*****	30 Quarterly Average	45 Quarterly Maximum	mg/L	Quarterly	24-hr Composite	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	*****	*****	*****	*****	30 Quarterly Average	45 Quarterly Maximum	mg/L	Quarterly	24-hr Composite	Jan-Dec

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item:** Outfall 003 (External - Ash Management Unit Storm Water Runoff Pond Discharge)

**RPNT0000000021: MS0061751-003**

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<b>Cadmium (Total Recoverable) Effluent</b>	Report Quarterly Average	Report Quarterly Maximum	pounds per day	*****	Report Quarterly Average	Report Quarterly Maximum	mg/L	Monthly When Discharging	Composite Sample	Jan-Dec
<b>Flow Effluent</b>	*****	Report Quarterly Maximum	Million Gallons per Day	*****	*****	*****	*****	Daily When Discharging	Measurement	Jan-Dec
<b>Lead (Total Recoverable) Effluent</b>	Report Quarterly Average	Report Quarterly Maximum	pounds per day	*****	Report Quarterly Average	Report Quarterly Maximum	mg/L	Monthly When Discharging	Composite Sample	Jan-Dec
<b>pH Effluent</b>	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	Daily When Discharging	Grab Sampling	Jan-Dec
<b>Solids (Total Suspended) Effluent</b>	*****	*****	*****	*****	30 Quarterly Average	45 Quarterly Maximum	mg/L	Monthly When Discharging	Composite Sample	Jan-Dec

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Facility Requirements

Permit Number: MS0061751

Activity ID No.: PER20110001

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**AI0000036313 (36313) IGCC Steam Electric :**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]
L-2		There shall be no discharge of floating solids or visible foam in other than trace amounts. [11 Miss. Admin. Code Pt. 6, R.2.2.A(2).]
L-3		The discharges shall not cause the occurrence of a visible sheen on the surface of the receiving waters. [11 Miss. Admin. Code Pt. 6, R.2.2.A(2).]
L-4		Samples taken in compliance with the monitoring requirements specified in this permit shall be taken at the nearest accessible point after final treatment but prior to mixing with the receiving stream or as otherwise specified in this permit. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(28).]

**Record-Keeping Requirements:**

Condition No.	Condition
R-1	<p><b>Recording of Results</b></p> <p>For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all information obtained from such monitoring including:</p> <ul style="list-style-type: none"><li>(1) The exact place, date, and time of sampling;</li><li>(2) The dates the analyses were performed;</li><li>(3) The person(s) who performed the analyses;</li><li>(4) The analytical techniques, procedures or methods used; and</li><li>(5) The results of all required analyses. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(29)(a).]</li></ul>

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Facility Requirements

Permit Number: MS0061751

Activity ID No.: PER20110001

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**AI0000036313 (continued):**

**Submittal/Action Requirements:**

Condition No.	Condition
S-1	<p><b>Reporting Requirements - Planned Changes</b></p> <p>The permittee shall give notice to the Permit Board as soon as possible of any planned physical alterations or additions, including but not limited to, a change of operation to the permitted facility. Notice is required in the circumstances that follow:</p> <p>(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether the facility is a new source in 40 CFR 122.29(b); or</p> <p>(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to either effluent limitations in the permit or notification requirements under 40 CFR 122.42(a)(1).</p> <p>(3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan; [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(15)(a).]</p>
S-2	<p><b>Reporting Requirements - Anticipated Noncompliance</b></p> <p>The permittee shall give advance notice to the Permit Board of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(29)(b).]</p>
S-3	<p><b>Noncompliance Notification - Twenty-Four Hour Reporting</b></p> <p>(1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and/or prevent recurrence of the noncompliance.</p> <p>(2) The following shall be included as information which must be reported within 24 hours under this paragraph.</p> <p>(i) Any unanticipated bypass which exceeds any effluent limitation in the permit.</p> <p>(ii) Any upset which exceeds any effluent limitation in the permit.</p> <p>(iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Permit Board in the permit to be reported within 24 hours.</p> <p>(iv) The Executive Director may waive the written report on a case-by-case basis for reports under paragraph (1) of this section if the oral report has been received within 24 hours. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(29)(e).]</p>

\*\*\* Draft Permit \*\*\*

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Facility Requirements

Permit Number: MS0061751

Activity ID No.: PER20110001

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**AI0000036313 (continued):**

**Submittal/Action Requirements:**

---

Condition  
No.

Condition

---

S-4 Noncompliance Notification - Other Noncompliance

The permittee shall report all instances of noncompliance not reported under the twenty-four hour reporting requirements, at the time monitoring reports are submitted or within 30 days from the end of the month in which the noncompliance occurs. The reports shall contain the same information as is required under the twenty-four hour reporting requirements contained in this permit. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(29)(f).]

S-5 Noncompliance Notification - Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permit Board, it shall promptly submit such facts or information. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(29)(g).]

S-6 Expiration of Permit

At least 180 days prior to the expiration date of this permit pursuant to the State law and regulation, the permittee who wishes to continue to operate under this permit shall submit an application to the Permit Board for reissuance. The Permit Board may grant permission to submit an application later than this, but no later than the expiration date of the permit. [11 Miss. Admin. Code Pt. 6, R.1.1.5.B(1).]

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**Submittal/Action Requirements:**

Condition No.	Condition
S-7	<p>Requirements Regarding Cooling and Boiler Water Additives</p> <p>Notification shall be made to the permitting authority in writing not later than sixty (60) days prior to initiating the addition of any chemical product to the cooling water and/or boiler water which is subject to discharge, other than those previously approved and/or used. Such notification should include, but not be limited to:</p> <ul style="list-style-type: none"><li>(1) Name and composition of the proposed additive,</li><li>(2) Proposed discharge concentration,</li><li>(3) Dosage addition rates,</li><li>(4) Frequency of use,</li><li>(5) EPA registration, if applicable, and</li><li>(6) Aquatic species toxicological data.</li></ul> <p>Written approval must be received from the permitting authority prior to initiating use. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(14).]</p>
S-8	<p>The permittee shall submit a report containing the monitoring results required by Outfall 003 permit conditions S-1 and S-2, which are located on page 23 of this permit. This report shall be sent the Environmental Permits Division and should NOT be combined with the Discharge Monitoring Report (DMR) submittal. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1. IV.A.28(a)]</p>

**Narrative Requirements:**

**Definitions:**

Condition No.	Condition
T-1	<p>Definitions: General</p> <p>The permittee shall refer to 11 Miss. Admin. Code Pt. 6, R. 1.1.1.A for definitions of any permit term not specified in this permit. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A]</p>

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**Narrative Requirements:**

**Definitions:**

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No. Condition

T-2 Definitions: Monthly Average

"Monthly Average" means the average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during the month. The monthly average for fecal coliform bacteria is the geometric mean of "daily discharges" measured during the calendar month. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(44).]

T-3 Definitions: Daily Discharge

"Daily discharge" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily average" is calculated as the average measurement of the discharge of the pollutant over the day. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(15).]

T-4 Definitions: Daily Maximum

"Daily maximum" means the highest "daily discharge" over a calendar month. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(16).]

T-5 Definitions: Toxic Pollutants

"Toxic pollutants" means any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices", any pollutant identified in regulations implementing Section 405(d) of the Clean Water Act. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(71).]

T-6 Definitions: Hazardous Substances

"Hazardous substances" are defined in 40 CFR 116.4. [40 CFR 116.4]

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**Narrative Requirements:**

**Definitions:**

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T-7	<p>Definitions: Weekly Average</p> <p>"Weekly average" means the average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. The weekly average for fecal coliform bacteria is the geometric mean of all "daily discharges" measured in a calendar week. In computing the geometric mean for fecal coliform bacteria, one (1) shall be substituted for sample results of zero. For self-monitoring purposes, the value to be reported is the single highest weekly average computed during a calendar month. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(86).]</p>
T-8	<p>Definitions: Quarterly Average</p> <p>"Quarterly Average" means the average of "daily discharges" over a three month period, calculated as the sum of all "daily discharges" measured during the quarter divided by the number of "daily discharges" measured during the quarter. The quarterly average for fecal coliform bacteria is the geometric mean of "daily discharges" measured during the quarter. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(61).]</p>
T-9	<p>Definitions: Maximum Monthly Average</p> <p>Maximum Monthly Average means the highest "monthly average" over a monitoring period. [40 CFR 122]</p>
T-10	<p>Definitions: Quarterly Maximum</p> <p>"Quarterly Maximum" means the highest "daily discharge" measured over a three-month period. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(62).]</p>
T-11	<p>Definitions: Yearly Average</p> <p>"Yearly Average" means the average of "daily discharges" over a calendar year, calculated as the sum of all "daily discharges" measured during the calendar year divided by the number of "daily discharges" measured during the calendar year. The yearly average for fecal coliform bacteria is the geometric mean of "daily discharges" during the calendar year. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(87).]</p>

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**Narrative Requirements:**

**Definitions:**

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Condition No.	Condition
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T-12	Definitions: Yearly Maximum
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"Yearly Maximum" means the highest "daily discharge" measured over a calendar year. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(88).]

T-13	Definitions: Submitted
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Except as specifically defined, or otherwise noted, in an applicable regulation or permit, any report, application, or other document or information that is required by these regulations, or by a permit issued by the Permit Board, to be submitted to the Commission, Permit Board, or MDEQ shall be deemed submitted only upon its receipt by MDEQ. [11 Miss. Admin. Code Pt. 6, Ch.1, Subch.1.]

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Condition No.	Condition
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T-14	The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule: Upon Permit Issuance. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(9).]
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T-15	Within 14 days after either an interim or final date of compliance specified by this permit, the permittee shall provide the Permit Board with written notice of his compliance or noncompliance with the requirements or conditions specified to be completed by that date. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(10).]
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T-16	Representative Sampling
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Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored wastewater. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(28).]

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Condition No.	Condition
T-17	<p><b>Reporting</b></p> <p>If the results for a given sample analysis are such that any parameter (other than fecal coliform) is not detected at or above the minimum level for the test method used, a value of zero will be used for that sample in calculating an arithmetic mean value for the parameter. If the resulting calculated arithmetic mean value for that reporting period is zero, the permittee shall report "NODI = B" on the DMR. For fecal coliform, a value of 1.0 shall be used in calculating the geometric mean. If the resulting fecal coliform mean value is 1.0, the permittee shall report "NODI = B" on the DMR. For each quantitative sample value that is not detectable, the test method used and the minimum level for that method for that parameter shall be attached to and submitted with the DMR. The permittee shall then be considered in compliance with the appropriate effluent limitation and/or reporting requirement. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 2.]</p>
T-18	<p><b>Reporting</b></p> <p>If the permittee monitors any pollutant as prescribed in the permit more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Permit Board. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(15)(c)(2).]</p>
T-19	<p><b>Reporting</b></p> <p>Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Permit Board in the permit. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(15)(c)(3).]</p>
T-20	<p><b>Test Procedures</b></p> <p>Test procedures for the analysis of pollutants shall include those set forth in 40 CFR 136 or alternative procedures approved and/or promulgated by EPA. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(30).]</p>

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**Narrative Requirements:**

Condition No.	Condition
T-21	<p><b>Records Retention</b></p> <p>All records and results of monitoring activities required by this permit, including calibration and maintenance records, shall be retained by the permittee for a minimum of three (3) years, unless otherwise required or extended by the Permit Board, copies of which shall be furnished to the Department upon request. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(29)(a).]</p>
T-22	<p><b>Falsifying Reports</b></p> <p>Any permittee who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required by the Permit Board to be maintained as a condition in a permit, or who alters or falsifies the results obtained by such devices or methods and/or any written report required by or in response to a permit condition, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for a violation of a permit condition pursuant to Section 49-17-43 of the Code. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(29)(d).]</p>
T-23	<p><b>Facility Expansion and/or Modification</b></p> <p>Any facility expansion, production increases, process modifications, changes in discharge volume or location or other changes in operations or conditions of the permittee which may result in a new or increased discharge of waste, shall be reported to the Permit Board by submission of a new application for a permit pursuant to 11 Miss. Admin. Code Pt. 6, R. 1.1.2.A. of the Mississippi Wastewater Regulations, or if the discharge does not violate effluent limitations specified in the permit, by submitting to the Permit Board a notice of a new or increased discharge. [11 Miss. Admin. Code Pt. 6, R.1.1.2.A.]</p>
T-24	<p><b>Duty to Comply</b></p> <p>The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(2).]</p>

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**Narrative Requirements:**

Condition No.	Condition
T-25	<p><b>Proper Operation, Maintenance and Replacement</b></p> <p>The permittee shall at all times properly operate, maintain, and when necessary, promptly replace all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. Proper replacement includes maintaining an adequate inventory of replacement equipment and parts for prompt replacement when necessary to maintain continuous collection and treatment of wastewater. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(18).]</p>
T-26	<p><b>Duty to Mitigate</b></p> <p>The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(19).]</p>
T-27	<p><b>Bypassing</b></p> <p>The permittee shall comply with the terms and conditions regarding bypass found in 40 CFR 122.41(m). [40 CFR 122.41(m)]</p>
T-28	<p><b>Bypassing - Definitions</b></p> <p>"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.</p> <p>"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. [40 CFR 122.41(m)]</p>
T-29	<p><b>Bypassing - Bypass not exceeding limitations</b></p> <p>The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the notice and prohibition provisions of the bypass requirements in this permit. [40 CFR 122.41(m)]</p>

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**Narrative Requirements:**

Condition No.	Condition
T-30	<p><b>Bypassing -Notice</b></p> <p>Anticipated bypass- If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.</p> <p>Unanticipated bypass- The permittee shall submit notice of an unanticipated bypass as required by the twenty-four hour reporting requirements set forth in this permit. [40 CFR 122.41(m)]</p>
T-31	<p><b>Bypassing- Prohibition of Bypass</b></p> <p>(1) Bypass is prohibited, and the Commission may take enforcement action against a permittee unless:</p> <p>(i) Bypass was unavoidable to prevent loss of life, personal injury, or sever property damage.</p> <p>(ii) There was no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and</p> <p>(iii) The permittee submitted notices as required under the Twenty-Four Hour reporting requirements set forth in this permit.</p> <p>(2) The Commission may approve an anticipated bypass, after considering its adverse affects, if the Commission determines that it will meet the three conditions listed above in paragraph (1) of this permit condition. [40 CFR 122.41(m)]</p>
T-32	<p><b>Upsets</b></p> <p>The permittee shall meet the conditions of 40 CFR 122.41(n) regarding "Upsets" and as in the upset requirements of this permit. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(27).]</p>

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Condition

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T-33      Upsets- Definition

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(27).]

T-34      Upsets - Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the "conditions necessary for demonstration of upset" requirements of this permit are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, shall not constitute final administrative action subject to judicial review. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(27).]

T-35      Upsets - Conditions necessary for demonstration of upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:

- (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
- (2) The permitted facility was at the time being properly operated;
- (3) The permittee submitted notice of the upset as required in 40 CFR 122.41(L)(6)(ii)(B)(24-hour notice of noncompliance); and
- (4) The permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate). [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(27).]

T-36      Upsets - Burden of proof

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(27).]

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T-37	<p>Removed Substances</p> <p>Solids, sludges, filter backwash, or other residuals removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent such materials from entering State waters and in a manner consistent with the Mississippi Solid Waste Disposal Act, the Federal Resource Conservation and Recovery Act, and the Mississippi Water Pollution Control Act. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(21).]</p>
T-38	<p>Power Failures</p> <p>If electric power is required, in order to maintain compliance with the conditions and prohibitions of the permit, the permittee shall either:</p> <p>(1) Provide an alternative power source to operate the wastewater control facilities; or, if such alternative power source is not in existence, and no date for its implementation appears in the permit,</p> <p>(2) Halt, reduce, or otherwise control production and/or all wastewater flows upon reduction, loss, or failure of the primary source of power to the wastewater control facilities. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(22).]</p>
T-39	<p>Inspection and Entry</p> <p>The permittee shall allow any authorized Commission representative to enter the permittee's premises at any reasonable time, to have access to and copy any applicable records, to inspect process facilities, treatment works, monitoring methods or equipment or to take samples, as authorized by Section 49-17-21 of the Code. In the event of investigation during an emergency response action, a reasonable time shall be any time of the day or night. Follow-up investigations subsequent to the conclusion of the emergency event shall be conducted at reasonable times. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(17).]</p>
T-40	<p>Transfer of Ownership or Control</p> <p>This permit is not transferable to any person without proper modification of this permit following procedures found in [11 Miss. Admin. Code Pt. 6, R.1.1.5.C.]</p>
T-41	<p>Signatory Requirements</p> <p>All applications, reports, or information submitted to the Permit Board shall be signed and certified. [11 Miss. Admin. Code Pt. 6, R.1.1.2.C.]</p>

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**Narrative Requirements:**

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Condition

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**T-42            Signatory Requirements - Application Signatures**

All permit applications shall be signed as follows:

(1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (i) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making function for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. [11 Miss. Admin. Code Pt. 6, R.1.1.2.C.]

**T-43            Signatory Requirements -Reports and Other Information**

All reports required by the permit and other information requested by the Permit Board shall be signed by a person described by the application signature requirements in this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described by the application signature requirements;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

(3) The written authorization is submitted to the Permit Board. [11 Miss. Admin. Code Pt. 6, R.1.1.2.C.]

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T-44	Signatory Requirements - Changes to Authorization
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If an authorization under the signatory requirements of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the signatory requirements of this permit must be submitted to the Permit Board prior to or together with any reports, information, or applications. [11 Miss. Admin. Code Pt. 6, R.1.1.2.C.]

T-45	Signatory Requirements - Certification
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Any person signing a document under the signatory requirements stated in this permit shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [11 Miss. Admin. Code Pt. 6, R.1.1.2.C.]

T-46	Availability of Records
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Except for information deemed to be confidential under the Mississippi Code Ann. 49-17-39 and 40 CFR 123.41, file information relating to this permit shall be made available for public inspection and copying during normal business hours at the office of the Department of Environmental Quality in Jackson, Mississippi. Written request must be provided in accordance with policies developed by the Commission and must state, specifically, records proposed for review, date proposed for review and copying requirements. [11 Miss. Admin. Code Pt. 6, R.1.1.3.E.]

T-47	Duty to Provide Information
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The permittee shall furnish to the Permit Board within a reasonable time any relevant information which the Permit Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. The permittee shall also furnish to the Permit Board upon request, copies of records required to be kept by the permit. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(16).]

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T-48	<p><b>Toxic Pollutants</b></p> <p>The permittee shall comply with any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) established under Section 307(a) of the Federal Water Pollution Control Act. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(26).]</p>
T-49	<p><b>Toxic Pollutants Notification Requirements</b></p> <p>The permittee shall comply with the applicable provisions of 40 CFR 122.42. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(26).]</p>
T-50	<p><b>Civil and Criminal Liability</b></p> <p>(1) Any person who violates a term, condition or schedule of compliance contained within this permit or the Mississippi Water Pollution Control Law is subject to the actions defined by law.</p> <p>(2) Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.</p> <p>(3) It shall not be the defense of the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(24).]</p>
T-51	<p><b>Oil and Hazardous Substance Liability</b></p> <p>Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Federal Water Pollution Control Act and applicable provisions under Mississippi Law pertaining to transportation, storage, treatment, or spillage of oil or hazardous substances. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(23).]</p>
T-52	<p><b>Property Rights</b></p> <p>The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations. [11 Miss. Admin. Code Pt. 6, R.1.1.5. E.]</p>

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## Narrative Requirements:

Condition No.	Condition
T-53	<p><b>Severability</b></p> <p>The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(25).]</p>
T-54	<p><b>Protection of Confidential Information</b></p> <p>(1) Pursuant to Miss. Code Ann. ' 49-17-39 and 40 CFR 123.41, the Permit Board shall make available to the public all information contained on any form and all public comments on such information. Effluent data and information concerning air or water quality shall also be made available to the public. Information that is determined by the Commission to be trade secrets shall not be disclosed to the public without prior consent of the source of such information. When a claim of confidentiality is made by a person in accordance with the provisions of Miss. Code Ann. ' 49-17-39, a recommendation on the questions of confidentiality shall be made by the Commission and forwarded to the Regional Administrator (or his/her designee) of EPA for his concurrence in such determination of confidentiality. [11 Miss. Admin. Code Pt. 6, R.1.1.3.F.]</p>
T-55	<p><b>Protection of Confidential Information- continued</b></p> <p>(2) A copy of a State, UIC, or NPDES permit application, public notice, fact sheet, draft permit and other forms relating thereto, including written public comment and other reports, files and information relating to the application not classified as confidential information by the Commission pursuant to part (1) of this requirement, shall be available for public inspection and copying during normal business hours at the office of the Department in Jackson, Mississippi. [11 Miss. Admin. Code Pt. 6, R.1.1.3.F.]</p>
T-56	<p><b>Protection of Confidential Information- continued</b></p> <p>(3) Upon determination by the Commission that information submitted by a permit applicant is entitled to protection against disclosure as trade secrets, the information shall be so labeled and otherwise handled as confidential. Copies of the information and a notice of the Commission's action shall be forwarded to the Regional Administrator (or his/her designee). In making its determination of entitlement to protection as a trade secret, the Commission shall follow the procedure set forth in Miss. Code Ann. ' 49-17-39. In the event the Commission denies the claim of confidentiality, the applicant shall have, upon notification thereof, the right to appeal the Commission's determination in the same manner provided for other orders of the Commission. No disclosure, except to EPA, shall be allowed until any appeal from the determination of the Commission is completed. [11 Miss. Admin. Code Pt. 6, R.1.1.3.F.]</p>

\*\*\* Draft Permit \*\*\*

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Facility Requirements

Permit Number: MS0061751

Activity ID No.: PER20110001

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**AI0000036313 (continued):**

**Narrative Requirements:**

Condition No.	Condition
T-57	<p><b>Spill Prevention and Best Management Plans</b></p> <p>Any permittee which has above ground bulk storage capacity, of more than 1320 gallons or any single container with a capacity greater than 660 gallons, of materials and/or liquids (including but not limited to, all raw, finished and/or waste material) with chronic or acute potential for pollution impact on waters of the State and not subject to Mississippi Hazardous Waste Management Regulations or 40 CFR 112 (Oil Pollution Prevention) regulations shall provide secondary containment as found in 40 CFR 112 or equivalent protective measures such as trenches or waterways which would conduct any tank releases to a permitted treatment system or sufficient equalization or treatment capacity needed to prevent chronic/acute pollution impact. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(12)(a).]</p>
T-58	<p><b>Reopener Clause</b></p> <p>This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation or storm water regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation or regulation so issued or approved:</p> <ol style="list-style-type: none"><li>1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or</li><li>2. Controls any pollutant not limited in the permit.</li><li>3. This permit shall be modified to reflect any additional or otherwise more stringent limitations and additional monitoring as determined to be necessary by the results of a Completed TMD. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.F(1).]</li></ol>
T-59	<p><b>Closure Requirements</b></p> <p>Should the permittee decide to permanently close and abandon the premises upon which it operates, it shall provide a Closure Plan to the Permit Board no later than 90 days prior to doing so. This Closure Plan shall address how and when all manufactured products, by-products, raw materials, stored chemicals, and solid and liquid waste and residues will be removed from the premises or permanently disposed of on site such that no potential environmental hazard to the waters of the State will be presented. Closure plan(s) submitted to and approved by Mississippi Department of Environmental Quality for compliance with other environmental regulations will satisfy the closure requirements for those items specifically addressed in the closure plan(s) as long as the closure does not present a potential for environmental hazard to waters of the State. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(11).]</p>

\*\*\* Draft Permit \*\*\*

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Facility Requirements

Permit Number MS0061751

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**AI0000036313 (continued):**

**Narrative Requirements:**

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Condition

No.

Condition

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T-60

Permit Actions

The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a modification of planned changes or anticipated noncompliance, does not stay any permit condition. [11 Miss. Admin. Code Pt. 6, R. 1.1.5.C(5).]

\*\*\* Draft Permit \*\*\*

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**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Facility Requirements

Permit Number MS0061751

Activity ID No.: PER20110001

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**RPNT0000000002 (MS0061751-001) Outfall 001 (External - Cooling Water Make Up Resevior Discharge):**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		The facility Cooling Make Up Water Reservoir shall be designed, constructed, and maintained to capture and contain the 100-year, 24-hour storm event and safely pass up to 100% of the probable maximum precipitation (PMP). The PMP event is approximately 44 inches. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		(1) The permittee shall monitor the surface elevation of the facility Cooling Make Up Water Reservoir bi-weekly. (2) The permittee shall monitor the daily volume of water transferred from the Cooling Make Up Water Reservoir and used in the steam electric power generation process. (3) The permittee shall monitor the daily volume of treated POTW effluent transferred into the Cooling Make Up Water Reservoir. (4) The permittee shall monitor the daily rain events. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

**Record-Keeping Requirements:**

Condition No.	Condition
R-1	(1) The permittee shall maintain records of the bi-weekly Cooling Make Up Water Reservoir surface elevation inspections. (2) The permittee shall maintain a daily water transfer operating log for the Cooling Make Up Water Reservoir. (3) The permittee shall maintain a daily rainfall log of storm events exceeding on-half of an inch of rainfall within a 24 hour period. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

\*\*\* Draft Permit \*\*\*

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Facility Requirements

Permit Number MS0061751

Activity ID No.: PER20110001

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**RPNT0000000002 (continued):**

**Submittal/Action Requirements:**

Condition No.	Condition
S-1	The Permittee shall submit analytical results on a quarterly Discharge Monitoring Report (DMR): Due quarterly, by the 28th of Jan, April, July, and Oct. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1. 4.A.(15)(c)]
S-2	The permittee is required to submit a Form 2C for Outfall 001. Submit a copy: Due once within 1.5 years (550 days) after effective date. If "no discharge" has taken place within the 1.5 year (550 day) timeframe, the permittee will be required to submit the Form 2C within 90 days following the first discharge from Outfall 001. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]
S-3	The permittee shall notify MDEQ in writing within seven (7) days of the initial discharge from Outfall 001. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

**\*\*\* Draft Permit \*\*\***

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Facility Requirements

Permit Number:MS0061751

Activity ID No.: PER20110001

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**RPNT0000000003 (MS0061751-101) Outfall 101 (Internal - Sanitary Waste Water Discharge):**

**Submittal/Action Requirements:**

Condition No.	Condition
S-1	The Permittee shall submit analytical results on a quarterly Discharge Monitoring Report (DMR): Due quarterly, by the 28th of Jan, April, July, and Oct. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1. 4.A.(15)(c)]

\*\*\* Draft Permit \*\*\*

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company Kemper Island Facility

Facility Requirements

Permit Number MS0061751

Activity ID PER20001

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**RPNT0000000021 (MS0061751-003) Outfall 003 (External - Ash Management Unit Storm Water Runoff Pond Discharge):**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		The Ash Management Unit Number 1 (AMU #1) Storm Water Runoff Basin shall be designed, constructed, and maintained to capture and contain the 100-year, 24-hour storm event while safely passing 35% of the probable maximum precipitation (PMP). The PMP event is 44 inches. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		(1) The permittee shall monitor the pond surface elevation of the AMU #1 Basin bi-weekly. (2) The permittee shall monitor the daily volume of water transferred from the AMU #1 Basin. (3) The permittee shall monitor the daily rain events. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

**Record-Keeping Requirements:**

Condition No.	Condition
R-1	(1) The permittee shall maintain records of the bi-weekly AMU #1 Basin Pond Surface elevation inspections. (2) The permittee shall maintain a daily water transfer operating log from the AMU #1 Basin. (3) The permittee shall maintain a daily rainfall log of storm events exceeding one-half of an inch of rainfall within a 24 hour period. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

\*\*\* Draft Permit \*\*\*

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Facility Requirements

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Activity ID No.: PER20110001

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**RPNT0000000021 (continued):**

**Submittal/Action Requirements:**

**Cadmium (Total Recoverable):**

Condition No.	Condition
S-1	Cadmium (Total Recoverable): shall be monitored at Outfall 003 on a monthly basis, utilizing 24-hour composite sampling, until 12 monthly samples have been collected. Sampling should begin following the effective re-issuance date of this permit and shall be representative of all 4 seasons upon completion. Total Recoverable Arsenic shall be analyzed using EPA method 200.8 or an approved equivalent method with a MQL of 1.0 micrograms/L. Once completed, the analytical result and date of all 12 sampling events shall be submitted in a report as required in permit condition S-10 on page 7 of this permit. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

**Lead (Total Recoverable):**

Condition No.	Condition
S-2	Lead (Total Recoverable): shall be monitored at Outfall 003 on a monthly basis, utilizing 24-hour composite sampling, until 12 monthly samples have been collected. Sampling should begin following the effective re-issuance date of this permit and shall be representative of all 4 seasons upon completion. Total Recoverable Arsenic shall be analyzed using EPA method 200.8 or an approved equivalent method with a MQL of 1.0 micrograms/L. Once completed, the analytical result and date of all 12 sampling events shall be submitted in a report as required in permit condition S-10 on page 7 of this permit. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

Condition No.	Condition
S-3	The Permittee shall submit analytical results on a quarterly Discharge Monitoring Report (DMR): Due quarterly, by the 28th of Jan, April, July, and Oct. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1. 4.A.(15)(c)]
S-4	The permittee is required to submit a Form 2C for Outfall 003. Submit a copy: Due once within 1.5 years (550 days) after effective date. If "no discharge" has taken place within the 1.5 year (550 day) timeframe, the permittee will be required to submit the Form 2C within 90 days following the first discharge from Outfall 003. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]
S-5	The permittee shall notify MDEQ in writing within seven (7) days of the initial discharge from Outfall 003. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

\*\*\* Draft Permit \*\*\*

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Mississippi Power Company, Kemper IGCC Facility

Facility Requirements

Permit Number: MS0061751

Activity ID No.: PER20110001

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**RPNT0000000021 (continued):**

**Narrative Requirements:**

Condition No.	Condition
T-1	Composite sampling means manually compositing three (3) individual 500 mL aliquots of waste water discharge collected at the beginning, middle, and end of the discharge event. [11 Miss Admin, Code Pt. 6, Ch. 1, Subch. 1.]

\*\*\* Draft Permit \*\*\*

## GENERAL INFORMATION

Mississippi Power Company, Kemper IGCC Facility  
5835 Highway 493  
DeKalb, MS  
Kemper County

### Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
36313	Mississippi Power Company, Kemper IGCC Facility	Official Site Name	10/12/2007	
MSR104866	Mississippi Power Company, Kemper IGCC Facility	GP-Construction	11/13/2007	5/31/2010
138000017	Mississippi Power Company, Kemper IGCC Facility	Air-Construction	10/14/2008	
WQC2009085	Mississippi Power Company, Kemper IGCC Facility	WQC Number	11/5/2009	
SAM200901149DMY	Mississippi Power Company, Kemper IGCC Facility	COE Public Notice/ Permit Number	11/5/2009	12/21/2009
MSU009005	Mississippi Power Company, Kemper IGCC Facility	Water - SOP	3/9/2010	2/28/2015
MSR104866	Mississippi Power Company, Kemper IGCC Facility	GP-Construction	8/22/2011	12/31/2015
MSR000105031	MPC Ratcliffe Electric Generating Plant	Hazardous Waste-EPA ID	8/26/2011	
SW0350040551	Mississippi Power Company, Kemper IGCC Gadification Ash Management Uni	SolidWaste - NonMSW Landfill	11/14/2011	10/31/2021
MSG130366	Mississippi Power Company, Kemper IGCC Facility	GP-Hydrostatic Testing	7/10/2012	4/10/2013
MSG130369	Mississippi Power Company, Kemper IGCC Facility	GP-Hydrostatic Testing	8/7/2012	8/31/2016

**Basin:** Pascagoula River Basin

**Location Description:** Application Emissions Summary IGCC#1

\*\*\* Draft Permit \*\*\*

## **GENERAL INFORMATION**

### **Relevant Documents:**

Cover Letter, Form 1, Form 2-D, Drawings

\*\*\* Draft Permit \*\*\*

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Glenn  
X-5159



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MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

James I. Palmer, Jr., Executive Director

May 24, 1999

New source ?  
major  
unidentified industrial  
sources  
OK - no impairment  
new  
20  
within  
6 month

Ms. Karrie Jo Shell  
Surface Water Permit Section  
U.S. EPA, Region IV  
61 Forsyth Street  
Atlanta, Georgia 30303

Dear Ms. Shell:

Re: City of Meridian  
Proposed NAS Wastewater Facility  
Draft NPDES Permit No. MS0055735  
Submittal for EPA Review

Enclosed herewith for your review are copies of the following documents related to the issuance of the above referenced permit:

- Fact Sheet and/or Rationale (with calculations for revised draft)
- Application
- Draft Permit
- Modeling Data
- Public Notice
- Antidegradation Policy Review

Be advised that this permit has undergone review of our anti-degradation policy. The following reasons were included in our review as rationale for accepting this project:

- This project moves a current NPDES discharge which currently is permitted to the Naval Air Station in Meridian and is in a location where it can take septic tanks off-line as well.
- This project also has the potential to take additional existing NPDES discharges offline.

Ms. Shell  
May 24, 1999  
Page -2-

-This project is identified to be key to the viability of the Naval Air Station; the base is a major employer, and closure would have severe adverse impacts to the community.

The subject permit is scheduled to be issued on July 13, 1999. If no comments are received from EPA prior to the aforementioned date, we will assume that the subject draft permit is adequate for reissuance. If you have any questions regarding the enclosed packet, please do not hesitate to contact us.

Respectfully,



Greg Burgess  
Municipal Permit Compliance Branch

TGB:tgb  
Enclosures

11

FACT SHEET

APPLICATION FOR  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
PERMIT TO DISCHARGE WASTEWATER TO WATERS  
OF THE STATE OF MISSISSIPPI

Application No.: MS0055735

Date: May 21, 1999

1. SYNOPSIS OF APPLICATION

a. Name and Address of Applicant

City of Meridian  
P. O. Box 1430  
Meridian, Mississippi 39302-1430

b. Description of Applicant's Operation

Municipal Wastewater Collection and Treatment

c. Production Capacity of Facility

1.0 MGD

d. Description of Existing Pollution Abatement Facilities

Sequential Batch Reactor (proposed)

e. Applicant's Receiving Waters

Sowashee Creek —

f. Description of Discharges

Outfall 001 is described as Biologically treated domestic wastewater.

2. PROPOSED EFFLUENT LIMITATIONS

~ See Attached Permit ~

3. MONITORING REQUIREMENTS

The applicant will be required to monitor regularly for flow and those parameters limited in Section 2 above with sufficient frequency to ensure compliance with the permit conditions.

Frequency, methods of sampling, and reporting dates will be specified in the final permit.

4. PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS

Beginning the issuance date of this permit, the permittee shall achieve compliance with the final effluent limitations.

5. PROPOSED CONDITIONS OF APPLICABILITY AND OTHER REQUIREMENTS

The applicant will be required at all times to operate facilities as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants.

The permittee shall provide an adequate operate staff which is duly qualified to carry out the operation, maintenance and testing functions required to insure compliance specified in the permit.

Maintenance of treatment facilities that result in degradation of effluent quality shall be scheduled during noncritical water quality period and shall be carried out in a manner approved by the Mississippi Office of Pollution Control.

The permittee is required to submit information of a periodic basis on the quality and quantity of effluent introduced into the facility by major contributing industries.

6. WATER QUALITY STANDARDS AND EFFLUENT STANDARDS APPLIED TO THE DISCHARGE

State of Mississippi Water Quality Criteria, Wastewater Regulations, Antidegradation Policy, and Modeling. Sowashee Creek is classified as Fish and Wildlife.

7. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Mississippi Office of Pollution Control Permit Board proposes to issue an NPDES permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Interested persons are invited to submit written comments on the permit application or on the Permit Board's proposed determinations to the following address:

Mississippi Department of Environmental Quality  
Office of Pollution Control  
P. O. Box 10385  
Jackson, Mississippi 39289-0385

Additional details about the application and the proposed determination, a sketch showing the location of the discharge, and a copy of the draft permit are available by writing Glenn Odom at the Permit Board's address or calling 961-5171.

All comments received prior to June 30, 1999, will be considered in the formulation of final determinations with regard to this application.

b. Public Hearing

The Permit Board may hold a public hearing if there is a significant degree of public interest in a proposed permit or group of permits. Public notice of such a hearing will be circulated in newspapers in the geographical area of the discharge and to those on the agency's mailing list at least 30 days prior to the hearing.

Following the public hearing, the Permit Board may take such modifications in the terms and conditions of the proposed permits as may be appropriate and shall issue or deny the permit. Notice of issuance or denial will be circulated to those who participated in the hearing and to appropriate persons on the mailing list.

c. Issuance of the Permit When No Public Hearing is Held

If no public hearing is held, and, after review of the comments received, the Permit Board's determinations are substantially unchanged, the permit will be issued and become effective immediately.

If no public hearing is held, but there have been substantial changes, public notice of the Permit Board's revised determinations will be made. Following a 30-day comment period, the permit will be issued and become effective immediately, unless a public hearing is granted.

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DRAFT

**State of Mississippi  
Water Pollution Control  
PERMIT**

TO DISCHARGE WASTEWATER IN ACCORDANCE WITH THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

**THIS CERTIFIES THAT**

**CITY OF MERIDIAN  
(NAS FACILITY / SEQUENTIAL BATCH REACTOR)**

has been granted permission to discharge wastewater into

**Sowashee Creek**

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof. This permit is issued in accordance with the provisions of the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402(b) of the Federal Water Pollution Control Act.

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**

\_\_\_\_\_  
**AUTHORIZED SIGNATURE  
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Issued: **DRAFT** July 12, 1999

Permit No. MS0055735

Expires: July 12, 2004

# PART I

## A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning upon permit issuance, and lasting until July 12, 2004, the permittee is authorized to discharge from outfall serial number 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS		
	Monthly Average (lbs/day)	Maximum Weekly Average	Monthly Average	Maximum Weekly Average	Measurement Frequency	Sample Type	Sampling Point
Flow-MGD	--	--	1.0	--	Daily	Continuous	Effluent
Biochemical Oxygen Demand (5-day)	83	125	10 mg/l	15 mg/l	1 Day/Week	24-Hr Comp	Influent & Effluent
Suspended Solids	250	375	30 mg/l	45 mg/l	1 Day/Week	24-Hr Comp	Influent & Effluent
Ammonia Nitrogen	17	25	2 mg/l	3 mg/l	1 Day/Week	24-Hr Comp	Influent & Effluent
Fecal Coliform Bacteria, Geometric Mean (per 100 ml) (May - October)	--	--	200 Col	400 Col	1 Day/Week	Grab	Effluent
(November - April)	--	--	2000 Col	4000 Col	1 Day/Week	Grab	Effluent
Chlorine, Total Residual	--	--	0.015 mg/l	0.026 mg/l	Daily	Grab	Effluent

2. The effluent shall not cause an accumulation of solids or sewage sludges in the receiving stream.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. The effluent shall not cause a visible sheen on the receiving water.

A. (Continued)

5. The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units and shall be monitored **daily** with a grab sample of the effluent.
6. In addition to the specified limits, the monthly average effluent BOD (5-Day) and suspended solids concentration shall not exceed 15 percent of the respective monthly average influent concentrations.
7. The 30-minute settleability test for the aeration basin(s) shall be monitored **daily** and the monthly minimum and maximum values reported.
8. The aeration basin(s) dissolved oxygen shall be monitored **daily** and the monthly minimum and maximum values reported.
9. The dissolved oxygen shall not be less than 6.0 mg/l and shall be monitored **1 day/week** with a grab sample of the effluent.
10. The toxicity of the effluent shall be monitored as described in Part III.C.
11. The ambient dissolved oxygen concentration of the receiving stream shall be monitored **1 day/week at approximately 10:00 a.m.** at a point located approximately 1.6 rivermiles downstream of the discharge location in mid-channel and the minimum and maximum values reported on the Discharge Monitoring Report with an attached summary page of all values.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule:

Beginning the issuance date of this permit, the permittee shall achieve compliance with the effluent limitations specified on **Pages 2 and 3** of this permit.

2. No later than 10 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

**C. MONITORING AND REPORTING**

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous month shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) POSTMARKED NO LATER THAN THE 28TH DAY OF THE MONTH FOLLOWING THE COMPLETED REPORTING PERIOD. THE FIRST REPORT IS DUE ON AUGUST 28, 1999. Copies of these, and all other reports required herein, shall be signed in accordance with Sections 6 and 7 of the Mississippi Wastewater Permit Regulations, and shall be submitted to the Mississippi Environmental Quality Permit Board at the following address.

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**OFFICE OF POLLUTION CONTROL**

**P. O. Box 10385**

**Jackson, Mississippi 39289-0385**

3. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(h) of the Federal Water Pollution Control Act, as amended.

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- (a) The exact place, date, and time of sampling;
- (b) The dates the analyses were performed;
- (c) The person(s) who performed the analyses;
- (d) The analytical techniques or methods used; and
- (e) The results of all required analyses.

5. Records Retention

- (a) All records and information resulting from the monitoring activities required by this permit (including all records of; analyses performed; calibration and maintenance of instrumentation; and recording from continuous monitoring instrumentation) shall be retained for a minimum of three (3) years, or longer if requested by the Permit Board.

- (b) The permittee shall furnish to the Permit Board, upon request, copies of records required to be kept by this permit.

6. Definitions

- (a) The "monthly average" (applicable to municipal and domestic permits), other than for fecal coliform bacteria, is the arithmetic mean of all samples collected in a one-month period. The monthly average for fecal coliform bacteria is the geometric mean of all samples collected in a one-month period. In computing the geometric mean, one (1) shall be substituted for sample results of zero.
- (b) The "weekly average" (applicable to municipal permits), other than for fecal coliform bacteria, is the arithmetic mean of all the samples collected during a one-week period. The weekly average for fecal coliform bacteria is the geometric mean of all samples collected during a one-week period. In computing the geometric mean, one (1) shall be substituted for sample results of zero. For self-monitoring purposes the value to be reported is the single highest weekly average computed during a one-month period.
- (c) The "daily average" (applicable to industrial permits), other than for fecal coliform bacteria, is the arithmetic mean of all samples collected in a one-month period. The daily average for fecal coliform bacteria is the geometric mean of all samples collected in a one-month period. In computing the geometric mean, the value one (1) shall be substituted for sample results of zero.
- (d) The "daily maximum" (applicable to industrial and domestic permits), is the highest value recorded of any sample collected on any single day of the calendar month.

D. OTHER STANDARD CONDITIONS

1. Total Residual Chlorine Monitoring Conditions

The method of analysis for each sample shall be amperometric titration, DPD colorimetric, or specific ion electrode as specified in the test procedures for Analysis of Inorganic Pollutants, 40 CFR, Part 136, Table 1B.

For each sampling period, the limit of detection shall be no greater than 0.1 mg/l. If an analysis for a given sample results in a measurement of "less than the limit detection", then the reported value shall be reported as "none detected".

**PART II****A. MANAGEMENT REQUIREMENTS****1. Change in Discharge**

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions or treatment modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application. If such changes will not violate the effluent limitations specified in this permit, and upon written notice (in lieu of a new NPDES application) to the Mississippi Environmental Quality Permit Board, the permit may be modified to specify and limit any pollutants not previously limited.

**2. Duty to Comply 40 CFR 122.41(a)**

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, renovation and reissuance, or modification; or for denial of a permit renewal application.

**3. Noncompliance Notification**

If, for any reason, the permittee does not comply with or will be unable to comply with any provision specified in this permit, the permittee shall notify the Mississippi Environmental Quality Permit Board orally within 24 hours of becoming aware of such conditions. A written report shall also be provided within five (5) days of such time and shall contain the following information:

- a. A description of the discharge and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

**4. Facilities Operation**

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

5. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

6. Bypassing

Any diversion from or bypass of wastewater collection and treatment facilities is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit.

The permittee shall notify the Mississippi Environmental Quality Permit Board orally of each such diversion or bypass within 24 hours of the diversion or bypass, or if the need for the bypass is known in advance, it shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

7. Upsets 40 CFR 122.41(n)

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
  - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required in 40 CFR 122.41 (L)(6)(ii)(B) (24 hour notice of noncompliance).

(4) The permittee complied with any remedial measures required under 40 CFR 122.41 (d) (duty to mitigate).

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

**8. Removed Substances**

Solids, sludges, filter backwash, or other residuals removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent such materials from entering State waters and in a manner consistent with the Mississippi Solid Waste Disposal Act and the Federal Resource Conservation and Recovery Act.

**9. Power Failures**

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. In accordance with the Schedule of Compliance contained in Part I, provide an alternate power source sufficient to operate the wastewater collection and treatment facilities, or, if such alternate power source is not in existence, and no date for its implementation appears in Part I;
- b. Provide a method whereby the effluent limitations contained in Part I shall be met upon the reduction, loss, or failure of the primary source of power to the wastewater collection and treatment facilities.

**B. RESPONSIBILITIES**

**1. Right of Entry**

The permittee shall allow the Mississippi Environmental Quality Permit Board and the Regional Administrator of the U. S. Environmental Protection Agency and/or their authorized representatives, upon the presentation of credentials.

- a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and

**PART II**

**Page 9**

**Permit No. MS0055735**

- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

**2. Transfer of Ownership or Control**

This permit is not transferable to any person except after proper notice and approval by the Permit Board. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the Mississippi Environmental Quality Permit Board at least thirty (30) days in advance of the proposed transfer date. The notice should include a written agreement between the existing and new permittees containing a specific date for the transfer of permit responsibility, coverage, and liability.

**3. Signatory Requirements 40 CFR 122.41(k)**

All applications, reports, or information submitted to the Permit Board shall be signed and certified.

- a. All permit applications shall be signed as follows:

- (1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (1) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making function for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding 25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, representatively; or
- (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

- b. All reports required by the permit and other information requested by the Permit Board shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described above;

- (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
- (3) The written authorization is submitted to the Permit Board.
- c. Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Permit Board prior to or together with any reports, information, or applications.
- d. Certification. Any person signing a document under paragraphs (a) or (b) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

4. Availability of Records

Except for data determined to be confidential under the Mississippi Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of the Mississippi Department of Environmental Quality Office of Pollution Control.

5. Permit Modification

- a. The permittee shall furnish to the Permit Board within a reasonable time any relevant information which the Permit Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.
- b. Upon sufficient cause this permit may be modified, revoked, reissued, or terminated during its term.
- c. The filing of a request by the permittee for a permit modification, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

The permittee shall comply with any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) established under Section 307(a) of the Federal Water Pollution Control Act.

7. Toxic Pollutants Notification Requirements

The permittee shall comply with the applicable provisions of 40 CFR 122.42.

8. Civil and Criminal Liability

- a. Any person who violates a term, condition or schedule of compliance contained within this permit or the Mississippi Water Pollution Control Law is subject to the actions defined by law.
- b. Except as provided in permit conditions on "Bypassing" and "Upsets" (Part II, A-6 and 7), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.
- c. It shall not be the defense of the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

9. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Federal Water Pollution Control Act and applicable provisions of the Mississippi Water Pollution Control Law pertaining to spills of oil and hazardous materials.

10. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

11. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstance, and the remainder of this permit, shall not be affected thereby.

12. Expiration of Permit

The permittee shall not discharge after the expiration date of this permit unless he has submitted a completed application for reissuance no later than 180 days prior to the expiration date. The Head of the Office of Pollution Control may grant permission to submit an application later than this, but no later than the expiration date of the permit.

13. Certified Operator

The permittee shall provide written notification to the Mississippi Commission on Environmental Quality no later than thirty (30) days after the loss of the permittee's certified operator.

**PART III****A. REOPENER CLAUSE**

This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation or stormwater regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation or regulation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

**B. CLOSURE REQUIREMENTS**

Should the permittee decide to permanently close and abandon the premises upon which it operates, it shall so notify the Permit Board no later than 90 days prior to doing so. Accompanying this notification shall be a closure plan which describes how and when all manufactured products, by-products, raw materials, stored chemicals, and solid and liquid waste will be removed from the premises such that they will present no potential environmental hazard to the area. Abandonment of the site without providing proper notification as required herein, or without completing all aspects of the closure plan, will constitute a violation of this permit and may result in penalties of up to \$25,000.

**C. CHRONIC WHOLE EFFLUENT TOXICITY MONITORING REQUIREMENTS**

The Water Quality Standards of Mississippi require that all waters be free from substances in concentrations or combinations which are harmful to humans, animals, or aquatic life (State of Mississippi, Water Quality Criteria for Intrastate and Coastal Waters, Section II.4., Minimum Conditions Applicable to All Waters, page 3, adopted March 22, 1990). In accordance with such requirements, the permittee is authorized to discharge from outfall(s) 001 only in accordance with the following conditions:

1. The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.

2. The permittee shall perform 7-day chronic, static renewal, definitive (a control and five effluent concentrations) WET tests in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/600/4-91/002) or Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028) or the most recent edition\*.
- a. Dilution water used for these tests shall consist of reagent grade water, defined as distilled or deionized water that does not contain substances which are toxic to the test organisms. For freshwater tests, dilution water shall consist of reagent grade chemicals or mineral water combined to make moderately hard dilution water according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/600/4-89/001) or most recent edition\*. For estuarine testing, dilution water shall consist of synthetic seawater or hypersaline brine combined to achieve a salinity of 20 parts per thousand according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms (EPA/600/4-87/028) or most recent edition\*. These dilution waters will be deemed acceptable if the control organisms in the toxicity tests meet the minimum EPA criteria for chronic tests.
- b. If the Mississippi Office of Pollution Control determines the receiving waters are freshwater, the permittee shall conduct a Ceriodaphnia dubia Survival and Reproduction Test, and a Pimephales promelas Larval Survival and Growth Test on serial dilutions of effluent to determine if the discharge from outfall(s) 001 is chronically toxic. Such testing will determine if the water affects the survival, growth, and reproduction of the test organisms. Static renewal tests will be conducted on three 24-hour composite samples of effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/600/4-91/003), or the most recent edition\*, are met. All data shall be statistically analyzed according to the referenced manual.

- c. If the Mississippi Office of Pollution Control determines that the receiving water is estuarine, the permittee shall conduct a Menidia beryllina Larval Survival and Growth Test and a Mysidopsis bahia Survival, Growth, and Fecundity Test on serial dilutions of effluent to determine if the discharge from outfall(s) 001 is chronically toxic. Such testing will determine if the water affects the survival, growth, and fecundity of the test organisms. Static renewal tests will be conducted on three 24-hour composite samples of effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028) or most recent edition\* are met. All test data shall be statistically analyzed according to the referenced manual.
- d. A standard reference toxicant quality assurance test (chronic) shall be conducted concurrently with the effluent tests using both species used in the toxicity tests. Alternatively, if a lab conducts **monthly** QA/QC reference toxicant tests with both species as part of their SOP, these results may be submitted in lieu of the above mentioned concurrent tests results. In either case, the reference toxicant test results must be submitted with the final report as well as on the Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form within two weeks of test completion. Final chronic toxicity test results shall be in report form as outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027F) or most recent edition\*.
3. These chronic toxicity tests shall be initiated within 90 days of the date of issuance of the permit to evaluate wastewater toxicity. Such chronic toxicity tests shall be conducted once per quarter for a period of one year following the effective date of the permit. After the first year of testing, the frequency of monitoring may be reduced to once per six months for the life of the permit. Sampling shall be timed to cover the seasonal extremes of the year (hot-dry and cold-wet).

In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.7 and 40 CFR 122.61 (06-03-93).

\*Contact the Mississippi Office of Pollution Control Laboratory for information on most recent edition(s) of methods manual.

PART IV

A. SLUDGE MANAGEMENT REQUIREMENTS

1. General Compliance: The permittee shall comply with all existing Federal and State laws and regulations that apply to its sewage sludge use and disposal practice(s), with the Mississippi Nonhazardous Waste Management Regulations and with the CWA Section 405 (d) technical standards when promulgated.
2. Reopener: If an applicable "acceptable management practice" or numerical limitation for pollutants in sewage sludge promulgated under Section 405(d)(2) of the Clean Water Act, as amended by the Water Quality Act of 1987, is more stringent than the sludge pollutant limit or acceptable management practice in this permit, or controls a pollutant not limited in this permit, this permit shall be promptly modified or revoked and reissued to conform to the requirements promulgated under Section 405(d)(2). The permittee shall comply with the limitations by no later than the compliance deadline specified in the applicable regulations as required by Section 405(d)(2)(D) of the Clean Water Act.
3. Notice of Change in Sludge Disposal Practice: The permittee shall give prior notice to the Director of any change(s) planned in the permittee's sludge use or disposal practice.
4. Cause for Modification: 40 CFR 122.62(a)(1) provides that the following is a cause for modification but not revocation and reissuance of permits except when the permittee requests or agrees.

Alterations: There are material and substantial changes or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

**PART V**

**A. PRETREATMENT REQUIREMENTS**

1. This permit shall be modified, or alternately revoked and reissued by a date to be determined to incorporate an approved municipal pretreatment program as required under Section 402(b)(8) of the Federal Water Pollution Control Act and implementing regulations or by the requirements of the approved State pretreatment program, as appropriate.
2. Effluent limitations from this discharge are listed in Part I of this permit. If it becomes apparent that other pollutants attributable to inputs from major contributing industries using the municipal system are also present in the permittee's discharge, this permit may be revised to specify effluent limitations for any or all of such other pollutants in accordance with best practicable technology or water quality standards.
3. Under no circumstances shall the permittee allow introduction of the following wastes or pollutants into the waste treatment system.
  - a. Pollutants which create a fire or explosion hazard in the treatment works;
  - b. Pollutants which will cause corrosive structural damage to treatment works; but in no case discharges with a pH designed lower than 5.0, unless the works are specifically designed to accommodate such discharges;
  - c. Solids or viscous substances in amounts which cause obstructions to the flow in sewer or interference with the proper operation of the treatment works;
  - d. Wastewaters at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so as to cause a loss of treatment efficiency;
  - e. Heat in amounts which will inhibit biological activity in the treatment works resulting in interference, but in no case heat in such quantities that the temperature of the influent exceeds 40 degrees Celsius (104 degrees Fahrenheit), unless approval for alternate limits has been granted by the Permit Board.



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STATE OF MISSISSIPPI  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
JAMES I. PALMER, JR.  
EXECUTIVE DIRECTOR

## M E M O R A N D U M

To: GREG BURGESS Project Engineer (MPCB/IPCB/CPCB/MCB)  
From: Randy Reed, Chief, WQAB  
Date: Sep 30, 1997

## WASTELOAD ALLOCATION FOR NPDES PERMIT LIMITS

Facility: MERIDIAN - PROPOSED #2  
NPDES Permit No.: MS00 (PROPOSED) Outfall No.: 001  
City: MERIDIAN County: LAUDERDALE Basin: PASCAGOULA  
Receiving Water: SOWASNEE CREEK

7Q10: 0.50 cfs

Please include the following limits in the NPDES permit :

	Annual	Summer (May - Oct)	Winter (Nov - Apr)
Discharge(mgd)	<u>1.0</u>		
BOD5 (mg/l)	<u>10</u>		
NH3-N (mg/l)	<u>2</u>		
Min.D.O. (mg/l)	<u>6</u>		
F.C. (col/100ml)	<u>→</u>	<u>200</u>	<u>2000 M/L</u> <u>2500</u>
Cl2 (mg/l)	<u>0.015</u>		

Comments : 1 Antidegradation Policy Review, when approved,  
will be required for this new discharge 2 DO monitoring  
about 1.6 RM D/s required 3 Effluent biomonitoring for NH3-N toxicity  
required, according Ww Regs (Chapter 2, III A, 2C(4)(a))  
WQAB Project Engineer : S. Makera

Branch Chief : R Reed

9/23/97

9/30/97

cc: GLENN EDM Chief (MPCB/IPCB/CPCB/MCB)

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PUBLIC NOTICE

Mississippi Environmental Quality Permit Board  
P. O. Box 10385  
Jackson, MS 39289-0385  
Telephone No. (601)961-5171

June 1, 1999

The City of Meridian, P. O. Box 1430, Meridian, Mississippi 39302-1430 has applied to the Mississippi Environmental Quality Permit Board for the issuance of an NPDES Permit to discharge treated domestic wastewater from its NAS wastewater treatment facility into Sowashee Creek. The applicant's operation is the collection and treatment of domestic wastewater. One discharge is described in the application.

The environmental impact of this project has been evaluated in accordance with the applicable regulations and antidegradation policy and the staff of the Permit Board believes that, with proper environmental constraints and limitations on the applicant, this project will operate within all State and Federal environmental laws and standards. Therefore, the staff of the Board has preliminarily decided, based on available information, to recommend to the Board that a permit be issued containing numerous environmental regulatory constraints specifically stated in the draft permit. However, before proceeding further with the staff evaluation, public comments are being solicited. The staff recommendation to the Board, as well as the Board decision, will be made only after a thorough consideration of all public comments.

Persons wishing to comment upon or object to the proposed determinations are invited to submit comments in writing to Mr. Glenn Odom at the Permit Board's address shown above, no later than June 30, 1999. All comments received by that date will be considered in the formulation of final determinations regarding the application. A public hearing will be held if the Permit Board finds a significant degree of public interest in the proposed permit.

Additional details about the application and the proposed determination, a sketch showing the location of the discharge, and a copy of the draft permit are available by writing or calling Mr. Glenn Odom at the Permit Board's address and telephone number shown above. Also, this and other information is available for review and copying during normal business hours at the Southport Center Building located at 2380 Highway 80 West, Jackson, MS.

Please bring the foregoing to the attention of persons whom you know will be interested.

TYPE ACTION: (check one)

☐ Reissuance

☒ New Source Issuance

☐ Modification

FORM A-100  
OMB No. 5501-0001

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER

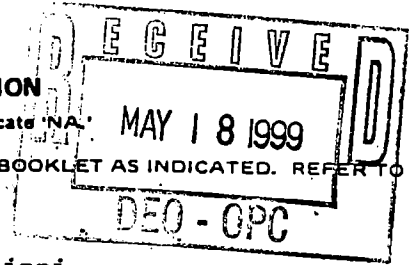


STANDARD FORM A - MUNICIPAL

SECTION I. APPLICANT AND FACILITY DESCRIPTION

Unless otherwise specified on this form all items are to be completed. If an item is not applicable indicate "NA".

ADDITIONAL INSTRUCTIONS FOR SELECTED ITEMS APPEAR IN SEPARATE INSTRUCTION BOOKLET AS INDICATED. REFER TO BOOKLET BEFORE FILLING OUT THESE ITEMS.



Please Print or Type

1. Legal Name of Applicant  
(see instructions)

101

City of Meridian, Mississippi

2. Mailing Address of Applicant  
(see instructions)  
Number & Street

102a

City of Meridian

City

102b

Post Office Box 1430

State

102c

Meridian, Mississippi

Zip Code

102d

39302-1430

3. Applicant's Authorized Agent  
(see instructions)  
Name and Title

103a

Mr. Ben E. Wolfe

Director of Public Works

Number & Street

103b

City of Meridian

City

103c

Post Office Box 1430

State

103d

Meridian, Mississippi

Zip Code

103e

39302-1430

Telephone

103f

601 485-1920

Area Code Number

4. Previous Application  
If a previous application for a permit under the National Pollutant Discharge Elimination System has been made, give the date of application.

104

99 5 14  
YR MO DAY

I certify that I am familiar with the information contained in this application and that to the best of my knowledge and belief such information is true, complete, and accurate.

John Robert Smith

Printed Name of Person Signing

102e

Mayor

Title

Signature of Applicant or Authorized Agent

102f

99 5 17  
YR MO DAY  
Date Application Signed

18 U.S.C. Section 1001 provides that:

Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and wilfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statement or representation, or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

FOR AGENCY USE

Received \_\_\_\_\_  
YR MO DAY

OFFICE: \_\_\_\_\_ EPA Region Number  
State

FOR AGENCY USE									

5. Facility (see instructions)  
Give the name, ownership, and physical location of the plant or other operating facility where discharge(s) presently occur(s) or will occur.

Name

Ownership (Public, Private or Both Public and Private).

Check block if a Federal facility

and give GSA Inventory Control Number

Location:  
Number & Street

City

County

State

6. Discharge to Another Municipal Facility (see instructions)  
a. Indicate if part of your discharge is into a municipal waste transport system under another responsible organization. If yes, complete the rest of this item and continue with Item 7. If no, go directly to Item 7.

b. Responsible Organization  
Receiving Discharge  
Name

Number & Street

City

State

Zip Code

- c. Facility Which Receives Discharge  
Give the name of the facility (waste treatment plant) which receives and is ultimately responsible for treatment of the discharge from your facility.

- d. Average Daily Flow to Facility (mgd) Give your average daily flow into the receiving facility.

7. Facility Discharges, Number and Discharge Volume (see instructions)  
Specify the number of discharges described in this application and the volume of water discharged or lost to each of the categories below. Estimate average volume per day in million gallons per day. Do not include intermittent or noncontinuous overflows, bypasses or seasonal discharges from lagoons, holding ponds, etc.

NAS WWTF - City of Meridian, Mississippi

East of Kansas City Southern RR tracks, north of  
Sowashee Creek, west of Clear Branch near the  
Town of Marion, Mississippi.

☒ PUB ☐ PRV ☐ BPP

☐ FED

N/A see above location

☐ Yes ☒ No

\_\_\_\_\_ mgd

One discharge of highly treated municipal wastewater at an average annual discharge rate of 1.0 MGD or less.

FOR AGENCY USE									

Number of  
Discharge Points

Total Volume Discharged,  
Million Gallons Per Day

To: Surface Water

Surface Impoundment with  
no Effluent

Underground Percolation

Well (Injection)

Other

Total Item 7

If 'other' is specified, describe

If any of the discharges from this facility are intermittent, such as from overflow or bypass points, or are seasonal or periodic from lagoons, holding ponds, etc., complete Item 8.

8. Intermittent Discharges

a. Facility bypass points

Indicate the number of bypass points for the facility that are discharge points. (see instructions)

b. Facility Overflow Points

Indicate the number of overflow points to a surface water for the facility (see instructions).

c. Seasonal or Periodic Discharge Points

Indicate the number of points where seasonal discharges occur from holding ponds, lagoons, etc.

9. Collection System Type

Indicate the type and length (in miles) of the collection system used by this facility. (see instructions)

Separate Storm

Separate Sanitary

Combined Sanitary and Storm

Both Separate Sanitary and Combined Sewer Systems

Both Separate Storm and Combined Sewer Systems

Length

☐ SST

☐ SAN

☐ CSS

☐ BSC

109b ☐ SSC

12.5 miles

10. Municipalities or Areas Served  
(see instructions)

Name

Actual Population  
Served

110a Naval Air Station, Meridian

110b N/A

110a Lauderdale County, MS

110b N/A

110a

110b

110a

110b

110a

110b

110a

110b

Total Population Served

## 113-

<1.0 mod

## 12. Permits, Licenses and Applications

**Permits, Licenses and Applications**  
List all existing, pending or denied permits, licenses and applications related to discharges from this facility. (see instructions)

[illegible]

**Attach all required maps and drawings to the back of this application. (see instructions)**

[illegible]

# STANDARD FORM A-MUNICIPAL

FOR AGENCY USE									

## SECTION II. BASIC DISCHARGE DESCRIPTION

Complete this section for each present or proposed discharge indicated in Section I, items 7 and 8, that is to surface waters. This includes discharges to other municipal sewerage systems in which the waste water does not go through a treatment works prior to being discharged to surface waters. Discharges to wells must be described where there are also discharges to surface waters from this facility. Separate descriptions of each discharge are required even if several discharges originate in the same facility. All values for an existing discharge should be representative of the twelve previous months of operation. If this is a proposed discharge, values should reflect best engineering estimates.

ADDITIONAL INSTRUCTIONS FOR SELECTED ITEMS APPEAR IN SEPARATE INSTRUCTION BOOKLET AS INDICATED. REFER TO BOOKLET BEFORE FILLING OUT THESE ITEMS.

### 1. Discharge Serial No. and Name

a. Discharge Serial No.  
(see instructions)

201a 001

b. Discharge Name  
Give name of discharge, if any -  
(see instructions)

201b NAS WWTF

c. Previous Discharge Serial No.  
If a previous NPDES permit  
application was made for this dis-  
charge (Item 4, Section I) provide  
previous discharge serial number.

201c Previous discharge did not have NPDES Permit,  
as it was prior to Clean Water Act.

### 2. Discharge Operating Dates

a. Discharge to Begin Date  
If the discharge has never  
occurred but is planned for some  
future date, give the date the  
discharge will begin.

202a 2001 01  
YR MO

b. Discharge to End Date If the dis-  
charge is scheduled to be discon-  
tinued within the next 5 years,  
give the date (within best estimate)  
the discharge will end. Give rea-  
son for discontinuing this discharge  
in Item 17.

202b N/A  
YR MO

### 3. Discharge Location Name the political boundaries within which the point of discharge is located:

State

203a Mississippi

County

203b Lauderdale County

(If applicable) City or Town

203c

Agency Use

203d	
203e	
203f	

### 4. Discharge Point Description (see instructions) Discharge is into (check one)

Stream (includes ditches, arroyos,  
and other watercourses)

204a ☒ STR

Estuary

☐ EST

Lake

☐ LKE

Ocean

☐ OCE

Well (Injection)

☐ WEL

Other

☐ OTH

If 'other' is checked, specify type

204b

### 5. Discharge Point - Lat/Long. State the precise location of the point of discharge to the nearest second. (see instructions)

Latitude

205a 32 DEG. 23 MIN. 14 SEC

Longitude

205b 88 DEG. 40 MIN. 00 SEC

6. Discharge Receiving Water Name  
Name the waterway at the point of discharge (see instructions)

Sowashee Creek

If the discharge is through an outfall that extends beyond the shoreline or is below the mean low water line, complete Item 7.

## 7. Offshore Discharge

- a. Discharge Distance from Shore

- b. Discharge Depth Below Water Surface

For Agency Use		
Major	Minor	Sub

For Agency Use	
303e	

\_\_\_\_\_ feet

1 @ normal creek level

If discharge is from a bypass or an overflow point or is a seasonal discharge from a lagoon, holding pond, etc., complete Items 8, 9 or 10, as applicable, and continue with Item 11.

## 8. Bypass Discharge (see instructions)

N/A

- a. Bypass Occurrence

Check when bypass occurs

Wet weather

Dry weather

- b. Bypass Frequency Give the actual or approximate number of bypass incidents per year.

Wet Weather

Dry weather

- c. Bypass Duration Give the average bypass duration in hours.

Wet weather

Dry weather

- d. Bypass Volume Give the average volume per bypass incident, in thousand gallons.

Wet weather

Dry weather

- e. Bypass Reasons Give reasons why bypass occurs.

Proceed to Item 11.

## 9. Overflow Discharge (see instructions)

N/A

- a. Overflow Occurrence Check when overflow occurs.

Wet weather

Dry weather

- b. Overflow Frequency Give the actual or approximate incidents per year.

Wet weather

Dry weather

DISCHARGE SERIAL NUMBER

FOR AGENCY USE

- c. **Overflow Duration** Give the average overflow duration in hours.

Wet weather

20001 \_\_\_\_\_ hours

Dry weather

20002 \_\_\_\_\_ Hours

- d. **Overflow Volume** Give the average volume per overflow incident in thousand gallons.

Wet weather

20003 \_\_\_\_\_ thousand gallons per incident

Dry weather

20004 \_\_\_\_\_ thousand gallons per incident

Proceed to Item 11

**10. Seasonal/Periodic Discharges**

- a. **Seasonal/Periodic Discharge Frequency** If discharge is intermittent from a holding pond, lagoon, etc., give the actual or approximate number of times this discharge occurs per year.

21001 \_\_\_\_\_ times per year

- b. **Seasonal/Periodic Discharge Volume** Give the average volume per discharge occurrence in thousand gallons.

21002 \_\_\_\_\_ thousand gallons per discharge occurrence

- c. **Seasonal/Periodic Discharge Duration** Give the average duration of each discharge occurrence in days.

21003 \_\_\_\_\_ days

- d. **Seasonal/Periodic Discharge Occurrence—Months** Check the months during the year when the discharge normally occurs.

21004 ☐ JAN ☐ FEB ☐ MAR

☐ APR ☐ MAY ☐ JUN

☐ JUL ☐ AUG ☐ SEP

☐ OCT ☐ NOV ☐ DEC

**11. Discharge Treatment**

- a. **Discharge Treatment Description** Describe waste abatement practices used on this discharge with a brief narrative. (See instructions)

The continuous treatment and discharge of  
sanitary waste flows from NAS Meridian and  
currently unidentified residential and light  
commercial sources between the NAS Meridian  
facility and the treatment works.

Treatment to be by treatment works presented on  
attached drawings (screening, activated sludge  
biological treatment "SBR", equalization post  
aeration, UV disinfection).

## DISCHARGE SERIAL NUMBER

FOR AGENCY USE

--	--	--	--	--	--	--	--	--	--

- b. Discharge Treatment Codes  
Using the codes listed in Table I of the Instruction Booklet, describe the waste abatement processes applied to this discharge in the order in which they occur, if possible. Separate all codes with commas except where slashes are used to designate parallel operations.

211b

S, SC, M, AS, P, I, LA, D, DA

If this discharge is from a municipal waste treatment plant (not an overflow or bypass), complete Items 12 and 13

12. Plant Design and Operation Manuals  
Check which of the following are currently available

- a. Engineering Design Report  
b. Operation and Maintenance Manual

212a

☐

212b

☐

13. Plant Design Data (see instructions)

- a. Plant Design Flow (mgd)  
b. Plant Design BOD Removal (%)  
c. Plant Design N Removal (%)  
d. Plant Design P Removal (%)  
e. Plant Design SS Removal (%)  
f. Plant Began Operation (year)  
g. Plant Last Major Revision (year)

213a

1.0 mgd

213b

96 %

213c

92 %

213d

N/A %

213e

85 %

213f

Anticipated 01/2001

213g

N/A

## 14. Description of Influent and Effluent (see instructions)

FOR AGENCY USE									

Parameter and Code 214	Influent	Effluent					
	Annual Average Value (1)	Annual Average Value (2)	Lowest Monthly Average Value (3)	Highest Monthly Average Value (4)	Frequency of Analysis (5)	Number of Analyses (6)	Sample Type (7)
Flow Million gallons per day 50050	1.0	1.0					
pH Units 00400							
Temperature (winter) ° F 74028	50	41					
Temperature (summer) ° F 74027	86	95					
Fecal Streptococci Bacteria Number/100 ml 74054 (Provide if available)							
Fecal Coliform Bacteria Number/100 ml 74055 (Provide if available)							
Total Coliform Bacteria Number/100 ml 74056 (Provide if available)							
BOD 5-day mg/l 00310	225	10					
Chemical Oxygen Demand (COD) mg/l 00340 (Provide if available)							
OR Total Organic Carbon (TOC) mg/l 00680 (Provide if available) (Either analysis is acceptable)							
Chlorine—Total Residual mg/l 50060	0	>0.015					



## 14. Description of Influent and Effluent (see instructions) (Continued)

Parameter and Code 2143	Influent	Effluent					
	Annual Average Value (1)	Annual Average Value (2)	Lowest Monthly Average Value (3)	Highest Monthly Average Value (4)	Frequency of Analysis (5)	Number of Analyses (6)	Sample Type (7)
Total Solids mg/l 00500							
Total Dissolved Solids mg/l 70300							
Total Suspended Solids mg/l 00530	200	30					
Settleable Matter (Residue) ml/l 00545							
Ammonia (as N) mg/l 00610 (Provide if available)	25	2					
Kjeldahl Nitrogen mg/l 00625 (Provide if available)							
Nitrate (as N) mg/l 00620 (Provide if available)							
Nitrite (as N) mg/l 00615 (Provide if available)							
Phosphorus Total (as P) mg/l 00665 (Provide if available)							
Dissolved Oxygen (DO) mg/l 00300	X	>6.0					

DISCHARGE SERIAL NUMBER

FOR AGENCY USE									

15. Additional Wastewater Characteristics  
Check the box next to each parameter if it is present in the effluent. (see instructions)

Parameter (215)	Present	Parameter (215)	Present	Parameter (215)	Present
Bromide 71870		Cobalt 01037		Thallium 01059	
Chloride 00940		Chromium 01034		Titanium 01152	
Cyanide 00720		Copper 01042		Tin 01102	
Fluoride 00951		Iron 01045		Zinc 01092	
Sulfide 00745		Lead 01051		Algicides* 74051	
Aluminum 01105		Manganese 01055		Chlorinated organic compounds* 74052	
Antimony 01097		Mercury 71900		Oil and grease 00550	
Arsenic 01002		Molybdenum 01062		Pesticides* 74053	
Beryllium 01012		Nickel 01067		Phenols 32730	
Barium 01007		Selenium 01147		Surfactants 38260	
Boron 01022		Silver 01077		Radioactivity* 74050	
Cadmium 01027					

\*Provide specific compound and/or element in Item 17, if known.

Pesticides (Insecticides, fungicides, and rodenticides) must be reported in terms of the acceptable common names specified in *Acceptable Common Names and Chemical Names for the Ingredient Statement on Pesticide Labels*, 2nd Edition, Environmental Protection Agency, Washington, D.C. 20250, June 1972, as required by Subsection 162.7(b) of the Regulations for the Enforcement of the Federal Insecticide, Fungicide, and Rodenticide Act.

272

☐ APS

~~ALM~~

[illegible]

## STANDARD FORM A-MUNICIPAL

## SECTION III SCHEDULED IMPROVEMENTS AND SCHEDULES OF IMPLEMENTATION

This section requires information on any uncompleted implementation schedule which has been imposed for construction of waste treatment facilities. Requirement schedules may have been established by local, State, or Federal agencies or by court action. IF YOU ARE SUBJECT TO SEVERAL DIFFERENT IMPLEMENTATION SCHEDULES, EITHER BECAUSE OF DIFFERENT LEVELS OF AUTHORITY IMPOSING DIFFERENT SCHEDULES (ITEM 1b) AND/OR STAGED CONSTRUCTION OF SEPARATE OPERATIONAL UNITS (ITEM 1c), SUBMIT SEPARATE SECTION III FOR EACH ONE.

## 1. Improvements Required

- a. Discharge Serial Numbers  
Affected List the discharge serial numbers, assigned in Section II, that are covered by this implementation schedule

- b. Authority Imposing Requirement  
Check the appropriate item indicating the authority for the implementation schedule. If the identical implementation schedule has been ordered by more than one authority, check the appropriate items. (see instructions)

Locally developed plan

Areawide Plan

Basin Plan

State approved implementation schedule

Federal approved water quality standards implementation plan

Federal enforcement procedure or action

State court order

Federal court order

FOR AGENCY USE

Sched. No. \_\_\_\_\_

0

0

1

☒ LOC☐ ARE☐ BAS☐ SQS☐ WQS☐ ENF☐ CRT☐ FED

- c. Improvement Description Specify the 3-character code for the General Action Description in Table II that best describes the improvements required by the implementation schedule. If more than one schedule applies to the facility because of a staged construction schedule, state the stage of construction being described here with the appropriate general action code. Submit a separate Section III for each stage of construction planned. Also, list all the 3-character (Specific Action) codes which describe in more detail the pollution abatement practices that the implementation schedule requires.

3-character general action description

3-character specific action descriptions

New

SEC / DIS / FUM /

## 2. Implementation Schedule and 3. Actual Completion Dates

Provide dates imposed by schedule and any actual dates of completion for implementation steps listed below. Indicate dates as accurately as possible. (see instructions)

## Implementation Steps

- a. Preliminary plan complete
- b. Final plan complete
- c. Financing complete & contract awarded
- d. Site acquired
- e. Begin construction
- f. End construction
- g. Begin Discharge
- h. Operational level attained

## 2. Schedule (Yr / Mo / Day)

3021	1 / 1 / 99
3022	6 / 30 / 99
3023	9 / 30 / 99
3024	1 / 1 / 99
3025	9 / 30 / 99
3026	1 / 1 / 01
3027	1 / 1 / 01
3028	2 / 1 / 01

## 3. Actual Completion (Yr / Mo / Day)

3021	___ / ___ / ___
3022	___ / ___ / ___
3023	___ / ___ / ___
3024	___ / ___ / ___
3025	___ / ___ / ___
3026	___ / ___ / ___
3027	___ / ___ / ___
3028	___ / ___ / ___

FOR AGENCY USE									

## STANDARD FORM A-MUNICIPAL

### SECTION IV. INDUSTRIAL WASTE CONTRIBUTION TO MUNICIPAL SYSTEM

Submit a description of each major industrial facility discharging to the municipal system, using a separate Section IV for each facility description. Indicate the 4 digit Standard Industrial Classification (SIC) Code for the industry, the major product or raw material, the flow (in thousand gallons per day), and the characteristics of the wastewater discharged from the industrial facility into the municipal system. Consult Table III for standard measures of products or raw materials. (see instructions)

**1. Major Contributing Facility**  
(see instructions)

Name

401a

NAS Meridian

Number & Street

401b

City

401c

County

401d

Lauderdale County

State

401e

Mississippi

Zip Code

401f

**2. Primary Standard Industrial Classification Code** (see instructions)

402

Military Air Training Facility

**3. Principal Product or Raw Material** (see instructions)

Quantity

Units (See Table III)

Product

403a

Pilots

403a

N/A

403a

Raw Material

403b

403b

403b

**4. Flow** Indicate the volume of water discharged into the municipal system in thousand gallons per day and whether this discharge is intermittent or continuous.

404a

1,000 thousand gallons per day

404b

☐ Intermittent (int) ☒ Continuous (con)

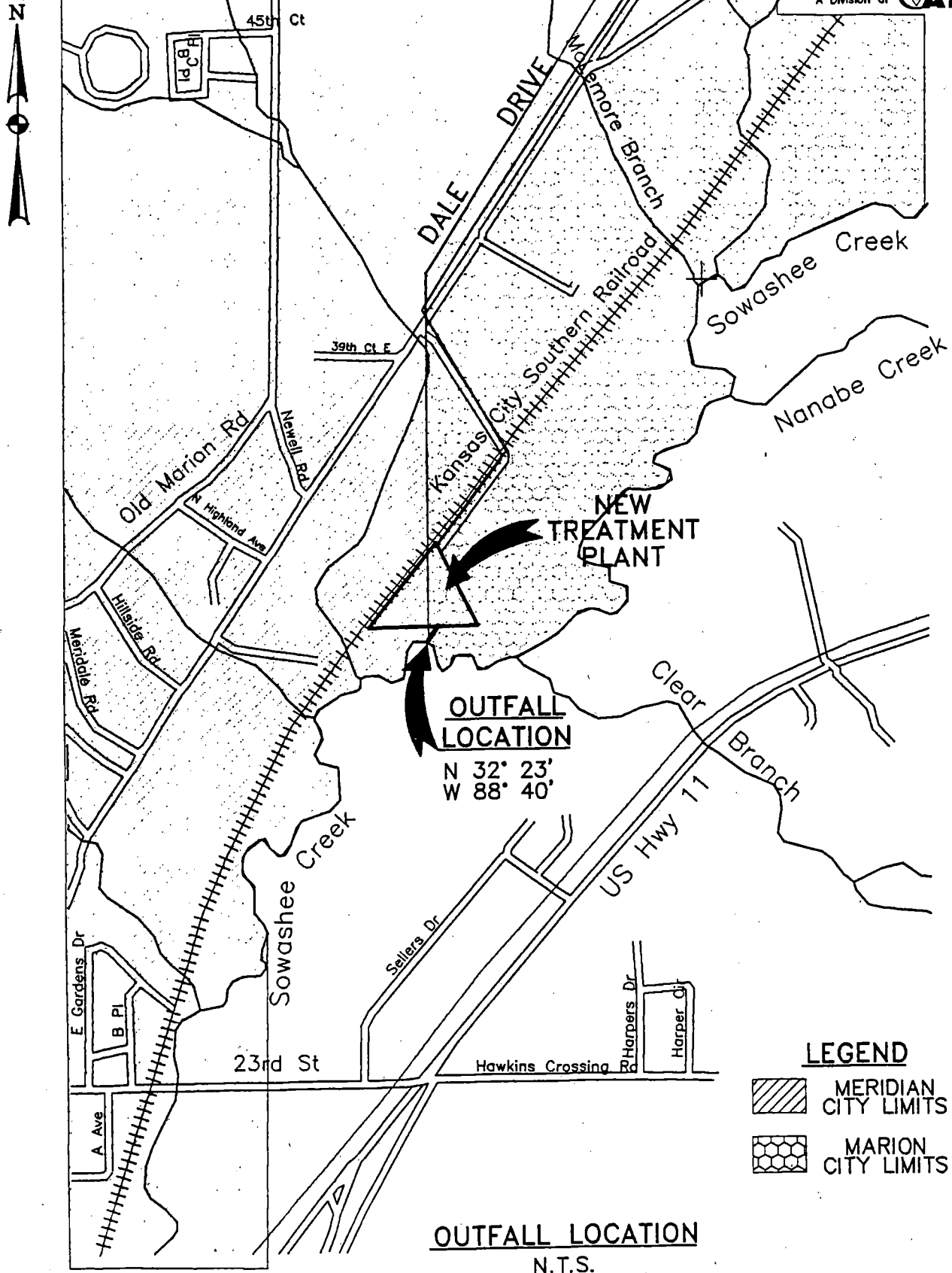
**5. Pretreatment Provided** Indicate if pretreatment is provided prior to entering the municipal system

405

☐ Yes ☒ No

**6. Characteristics of Wastewater** (see instructions)

Parameter Name	BOD	TSS	Ammonia	AKL			
Parameter Number	00310	00500	00610	00410			
Value	225	200	25	100			





**STATE OF MISSISSIPPI**  
HALEY BARBOUR  
GOVERNOR  
**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**  
CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

July 29, 2004

Attention: Ms. Dee Stewart

Re: Meridian NAS POTW  
Revisions

Dee,

The following 3-pages of the permit and 1-page of the rationale have been corrected.

In the permit:

- 85% removal statement was added
- Editions regarding bioassays were updated.
- Zinc monitoring was included

In the rationale:

- The silver statement was removed.

If you have any questions, please contact me at (601) 961-5601.

Sincerely,

A handwritten signature in black ink, appearing to be "CW" or similar initials.

Chad Winter  
Environmental Permits Division  
Municipal and Private Facilities Branch

# 3/5 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 001 (Municipal Wastewater)

RPNT000000001: MS0055735-001

Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Conc. / Quality Minimum	Conc. / Quality Average	Conc. / Quality Maximum	Conc. / Quality Units	Frequency	Sample Type	Which Months
	*****	*****	*****	*****	0.000016 Monthly Average	0.000028 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec
	83 Monthly Average	125 Monthly Maximum	pounds per day	*****	10 Monthly Average	15 Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
	Report Monthly Average	Report Monthly Maximum	pounds per day	*****	Report Monthly Average	Report Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
	*****	*****	*****	85 Minimum	*****	*****	% removal efficiency	monthly	calculations	Jan-Dec
	*****	*****	*****	6.0 Minimum	*****	*****	mg/L	weekly	grab sampling	Jan-Dec
	*****	*****	*****	Report Minimum	*****	Report Maximum	mg/L	daily	grab sampling	Jan-Dec
	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	daily	grab sampling	Jan-Dec
	*****	*****	*****	*****	*****	Report Maximum	mg/L	monthly	grab sampling	Jan-Dec
	*****	*****	*****	Report Minimum	*****	Report Maximum	mg/L	daily	grab sampling	Jan-Dec
	250 Monthly Average	375 Monthly Maximum	pounds per day	*****	30 Monthly Average	45 Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec

4/5

# Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number: MS0055735

Activity ID No.: PER20040001

Page 18 of 19

## Narrative Requirements:

Condition

No. Condition

T-56 Spill Prevention and Best Management Plans

Any permittee which has above ground bulk storage capacity, of more than 1320 gallons or any single container with a capacity greater than 660 gallons, of materials and/or liquids (including but not limited to, all raw, finished and/or waste material) with chronic or acute potential for pollution impact on waters of the State and not subject to Mississippi Hazardous Waste Management Regulations or 40 CFR 112 (Oil Pollution Prevention) regulations shall provide secondary containment as found in 40 CFR 112 or equivalent protective measures such as trenches or waterways which would conduct any tank releases to a permitted treatment system or sufficient equalization or treatment capacity needed to prevent chronic/acute pollution impact. [WPC-1 Chapter One Section IV.A(12)a]

T-57 Reopener Clause

This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation or storm water regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation or regulation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit; or
3. This permit shall be modified to reflect any additional or otherwise more stringent limitations and additional monitoring as determined to be necessary by the results of a Completed TMDL; or
4. This permit be modified by discontinuing Zinc monitoring requirements if results of future Zinc monitoring data demonstrate no reasonable potential to exceed water quality criteria. [WPC-1 Chapter One Section IV.F(1)]

T-58 Closure Requirements

Should the permittee decide to permanently close and abandon the premises upon which it operates, it shall provide a Closure Plan to the Permit Board no later than 90 days prior to doing so. This Closure Plan shall address how and when all manufactured products, by-products, raw materials, stored chemicals, and solid and liquid waste and residues will be removed from the premises or permanently disposed of on site such that no potential environmental hazard to the waters of the State will be presented. Closure plan(s) submitted to and approved by Mississippi Department of Environmental Quality for compliance with other environmental regulations will satisfy the closure requirements for those items specifically addressed in the closure plan(s) as long as the closure does not present a potential for environmental hazard to waters of the State. [WPC-1 Chapter One Section IV.A(11)]

4/5

# EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 001 (Municipal Wastewater)  
 RPNT0000000001: MS0055735-001

Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Conc. / Quality Minimum	Conc. / Quality Average	Conc. / Quality Maximum	Conc. / Quality Units	Frequency	Sample Type	Which Months
	Report Monthly Average	Report Monthly Maximum	pounds per day	*****	Report Monthly Average	Report Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
	*****	*****	*****	85 Minimum	*****	*****	% removal efficiency	monthly	calculations	Jan-Dec
	*****	*****	*****	Report Minimum	*****	Report Maximum	mg/L	quarterly	grab sampling	Jan-Dec

# Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number: MS0055735

Activity ID No.: PER20040001

## Limitation Requirements:

Page 2 of 19

Condition

No.

Parameter

Condition

L-6

3. These chronic toxicity tests shall be initiated within 90 days of the date of issuance of the permit to evaluate wastewater toxicity. Such chronic toxicity tests shall be conducted quarterly, twice during the hot-dry season and twice during the cold-wet season, for a period of one-year following the effective date of the permit. The frequency of monitoring will be reduced to semiannually for the life of the permit. Sampling shall be timed to cover the seasonal extremes of the year (hot-dry and cold-wet).

4. If any one chronic toxicity test indicates the IC25 is less than 75.5%, the provisions in Section 6 below shall apply, and the permittee shall conduct another chronic toxicity test(s) with the organism(s) that failed. This follow-up test must be completed within 30 days following completion of the failed test. Final chronic toxicity test results shall be in report form as outlined in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/821/R-02/013) or most recent edition. The permittee must also submit a completed Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form.

5. In the event the permittee passes the additional WET test, the permittee shall resume testing in accordance with the testing schedule set forth in the permit. In the event the permittee fails the second WET test, the permittee shall submit a Toxicity Reduction Evaluation Plan (TREP) within 45 days following completion of the follow-up test in order to reduce the toxicity of the effluent to safe levels. The first phase of the TREP will include increased monitoring to characterize the toxicity of the effluent.

6. If the IC25 of any test is less than 75.5%, then the effluent will be considered unacceptably chronically toxic, and this will constitute a violation of this permit. [WPC-1 Chapter One]

L-7

### CHRONIC BIOASSAY REQUIREMENTS

The toxicity of the effluent as the chronic value shall be greater than or equal to 75.5% and shall be monitored as described below.

The Water Quality Standards of Mississippi require that all waters be free from substances in concentrations or combinations which are harmful to humans, animals, or aquatic life (State of Mississippi, Water Quality Criteria for Intrastate and Coastal Waters, Section II.4., Minimum Conditions Applicable to All Waters, page 3, adopted March 22, 1990). In accordance with such requirements, the permittee is authorized to discharge from outfall(s) 001 only in accordance with the following conditions:

1. The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.

2. The permittee shall perform 7-day chronic, static renewal, definitive (a control and five effluent concentrations) WET tests in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/821/R-02/013) or Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/821/R-02/014) or the most recent edition\*. [WPC-1 Chapter One]



17

STATE OF MISSISSIPPI

HALEY BARBOUR

GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

July 13, 2004

Ms. Dee Stewart  
Program Manager  
NPDES and Biosolids Permits Section  
Water Management Division  
U. S. Environmental Protection Agency  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-0303

Dear Ms. Stewart:

Re: Meridian POTW, Naval Air Station Facility  
Lauderdale County  
Water Ref. No. MS0055735

Enclosed, please find a copy of the draft permit, permit rationale, fact sheet, and application for comment on the above referenced facility. Per our MOA with USEPA, please submit your comments within thirty (30) days of receiving this letter.

If you have any questions, please contact Chad Winter of our staff at (601)961-5171.

Sincerely,

*Chad Winter*

for

Jerry W. Cain, P.E., DEE  
Chief, Environmental Permits Division

Enclosure

13262 PER20040001

OFFICE OF POLLUTION CONTROL

POST OFFICE BOX 10385 • JACKSON, MISSISSIPPI 39289-0385 • TEL: (601) 961-5171 • FAX: (601) 354-6612 • [www.deq.state.ms.us](http://www.deq.state.ms.us)  
AN EQUAL OPPORTUNITY EMPLOYER

18



Dee  
Stewart/R4/USEPA/US  
@EPA

To: Dee Stewart/R4/USEPA/US@EPA  
cc:  
Subject: EPA/MDEQ NPDES enReview - Comments Resolved

07/29/04 09:30 PM  
Please respond to Dee  
Stewart

**Facility Name:** Meridian POTW, Naval Air Station Facility  
**City:** Meridian  
**County:** Lauderdale  
**Facility SIC:** 4952

**Permit Number:** MS0055735  
**Permit Program:** NPDES Major Municipal

In reference to the permit above received for review by EPA on 07/14/2004 comments submitted to MDEQ have been resolved. ... If you have any questions, please contact me at (404) 562-9334 or through e-mail at [stewart.dee@epa.gov](mailto:stewart.dee@epa.gov).

Recipients: [stewart.dee@epa.gov](mailto:stewart.dee@epa.gov), [byars.malikh@epa.gov](mailto:byars.malikh@epa.gov), [Rickey\\_Terry@deq.state.ms.us](mailto:Rickey_Terry@deq.state.ms.us),  
[Chad\\_Winter@deq.state.ms.us](mailto:Chad_Winter@deq.state.ms.us).

*This email was electronically generated on Thu 29-Jul-2004 20:30:05.*

# Region 4 NPDES Permit Overview Review Check sheet for

ICZS = 5.38%

12.71%

19

Facility Name Meridian POTW

Date of Review 7/27/04

NPDES No. MS0055735

Name & Phone of State Permit Contact \_\_\_\_\_

IWC = 75.6%

Check:  
Major ☒

Minor ☐

Stormwater only ☐

Industrial ☐

Municipal ☒

## Short Review

receiving water -  
Sowash Creek

Element	Yes	No	Comment
Correct Application?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Type?
Complete application? [significant information to determine reasonable potential analysis]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Fact Sheet/ Rationale?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
New or Expanded discharge?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Receiving waterbody on the 303(d) list?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Note pollutants:
TMDL approved?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	evaluated for aquatic life support for
If a TMDL is required, are the limits consistent with the TMDL?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Note pollutants: Biological impairment
If new or expanded discharge, was antideg. analysis done?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there a WQ variance (including WER) in the permit? If yes, send to Gail's Branch for review.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NA

## Complete Review

Element	Yes	No	Comment/Data
7Q10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
PERMIT APPLICATION:			
Did state follow its Reasonable Potential procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Do any EPA criteria apply?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	List pollutants:
Are proper minimum levels of detection indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	40 CFR 132 (secondary treatment)
For Industrials: Are pollutants noted as "Believed Absent" reasonable?	<input type="checkbox"/>	<input type="checkbox"/>	
For Municipals: Are the screened pollutants values reasonable?	<input type="checkbox"/>	<input type="checkbox"/>	
Have 3 pollutant analyses been performed within the last 4-5 years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Whole Effluent Toxicity Data included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	only 2 tests - very toxic to C. dubia

## PERMIT:

Complete Boilerplate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	122.41 and 122.42
Are all outfalls indicated in the application covered in the permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Have any loadings been increased since the previous permit? If yes, explain.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Have any limits been deleted, or made less stringent, since the previous permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If yes, has backsliding been addressed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are metals included in terms of "total recoverable"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appropriate compliance schedule?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	122.47
All monitoring requirements at least 1/year?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	122.44/122.45

Initial and date  
Specialist  
Center  
Int'l  
C/

Are the monitoring frequencies reasonable and sampling locations included?			
<b>Element</b>	<b>Yes</b>	<b>No</b>	<b>Comment/Data</b>
Toxicity language?			
If yes, note the date forwarded to Lisa Spurlin.	X		
Are there any wastestreams that need internal limits?		X	
<b>Industrial Permits:</b>			
Applicable Effluent Guideline?			
Are BMPs included?			
For continuous discharges, are daily max. and monthly ave. limits included?			
<b>POTW Permit:</b>			
Secondary treatment requirements included?	X		133
Nutrients limited?	X		NH <sub>3</sub> -N
Ambient monitoring required? If so, which pollutants? Also indicate upstream or downstream.		X	
For continuous dischargers, are weekly ave and monthly ave limits included?	X		122.45(d)(2)
Do Pretreatment procedures apply?	X		122.44(j) & 403
<b>FACT SHEET:</b>			
Location of facility included?	X		
Does discharge impact a neighboring state?		X	
Type of product included (if industrial permit)?			
Long-term production included?			
Basis for permit limits?	X		
Calculations included? Correct flows?	X		
Production values?	X		
Best Professional Judgment justification included?	X		
Any applicable seasonal limits justified?	X		
Final Decision Procedures include?	X		

#### Final Permit:

<b>Element</b>	<b>Yes</b>	<b>No</b>	<b>Comment</b>
Was permit publicly noticed?			
Permit term less than 5 years?			
Any significant changes since last draft version? If yes, does the amended fact sheet explain these changes.			

#### ACTION

#### COMMENTS

<b>Response</b> (Include hard copy in file)	<b>Sent Email</b>	<b>Sent Letter</b>
No Comment		
Comment letter		
Interim Objection		
General Objection		
Specific Objection		

Sent comment regarding 85% removal  
- tox test references  
- need for 3<sup>rd</sup> monitoring.

Initial and date

# PERMIT RATIONALE FOR REISSUANCE

Meridian POTW, Naval Air Station Facility  
 Lauderdale County  
 Meridian, Mississippi  
 Water NPDES No. MS0055735  
 June 3, 2004

## CLASSIFICATION – Municipal Major

1. DESCRIPTION OF WASTEWATER - Municipal Domestic
2. DESCRIPTION OF WASTEWATER TREATMENT- Wastewater is collected and treated via a sequencing batch reactor (SBR) followed by UV disinfection and post-aeration. See attachment No. 1 for flow schematic.
3. RECEIVING WATERS – Sowashee Creek. The 2002 State of Mississippi's 303(d) List of Waterbodies, Section A., denotes the Sowashee Creek drainage area, Waterbody ID Number: MS061, located in Lauderdale County (At Meridian from headwaters to mouth at Okatibbee Creek), to be evaluated for aquatic life support due to biological impairment. Sowashee Creek is classified as Fish and Wildlife.
4. The 7Q10 of the receiving stream at the point of discharge of the POTW is 0.5 cfs. The discharge point is located within the Pascagoula Basin. See attachment No. 2 for discharge location map.

The instream wastewater concentration (IWC)7Q10 at the point of discharge is determined by the following calculation:

$$IWC7Q10 = \frac{Q_w}{Q_r + Q_w} * 100$$

Where,  $Q_w$  = Design flow of the wastewater treatment facility  
 $Q_r$  = Receiving stream 7Q10

IWC calculation for the Meridian-NAS POTW is as follows:

$Q_w$  = 1.0 MGD or 1.55 cfs  
 $Q_r$  = 0.5 cfs

$$\frac{1.55 \text{ cfs}}{0.5 \text{ cfs} + 1.55 \text{ cfs}} * 100 = 75.6\%$$

5. SUMMARY AND BASIS OF DISCHARGE LIMITATIONS

<u>Parameter</u>	<u>Value</u>	<u>Basis</u>
Flow	1.0 MGD	Design
BOD5	10 / 15 mg/l	Modeled
TSS	30 mg/l / 45 mg/l	Technology Based
Fecal Coliform (May-Oct.) (Nov.-Apr.)	200 / 400 col. / 100ml 2,000/4,000 col. / 100ml	MSWQS MSWQS
pH	6.0 - 9.0 SU	MSWQS
NH <sub>3</sub> -N	2 / 3 mg/l	Modeled
Dissolved Oxygen	>6.0 mg/l	Modeled
Chlorine	0.015 / 0.02 mg/l	Modeled
Cadmium	0.0008 / 0.0023 mg/l	Modeled
Copper	0.0066 / 0.0093 mg/l	Modeled
Lead	0.0016 / 0.0397 mg/l	Modeled
Mercury	0.000016 / 0.0028 mg/l	Modeled
Chromium, (III)	0.06 / 0.43 mg/l	Modeled

See attached modeling data results Attachment No. 3.

Note: MSWQS = Mississippi State Water Quality Standards

6. Bioassay and Chemical Specific Evaluation

**Bioassay**

In accordance to State Regulation WPC-1 VI.B.2b., a whole effluent toxicity evaluation was performed as part of the renewal application. The applicant tested in accordance with "Long-Term Methods for estimating the chronic toxicity of Effluents and Receiving Water to Freshwater organisms". Long-term chronic WET tests were performed on ceriodaphnia dubia (invertebrates) and pimephales promelas (vertebrates). The WET tests on the species were performed in February 2004 and April 2004. Results of the WET tests are as follows and are included as attachment No. 4:

February 2004

<u>Species</u>	<u>IC25 Growth Results</u>
----------------	----------------------------

Ceriodaphnia Dubia	12.71%
Pimephales Promelas	>100%

April 2004

<u>Species</u>	<u>IC25 Growth Results</u>
Ceriodaphnia Dubia	5.38%
Pimephales Promelas	>100%

Since the inhibition concentrations were less than the IWC of 75.6%, it is presumed that the effluent is toxic to the receiving waters. Additionally, only two sets of bioassays were performed versus the four sets that the application requires. Regardless, additional bioassays will be required due to failures. This requirement can be found in Part III.C.

### Chemical Specific Analysis

Chemical specific analysis has been performed in accordance with State Regulations WPC-1 V1.B1. Municipalities shall determine the toxic characteristics of their wastewater by analyzing for the toxic pollutant listed in Table III of Appendix D of 40 CFR 122. The results are tabulated in attachment No. 5. The reported values are then analyzed and compared to water quality criteria to determine any possible toxic effect to the receiving waters. A synopsis of these calculations is listed in attachment No. 6. A column by column description of the calculations in attachment No. 6 is hereby provided:

Column No. 1 - Maximum concentration. The highest effluent reading of the parameter

Column No. 2 - The maximum concentration mixed with the receiving water IWC7Q10. This is calculated by the following equation.

$$\{ \text{Maximum concentration (Col. 1)} * \text{IWC\%} \} / 100$$

Column No. 3 - Acute allowable - Chemical Specific State Water Quality Criteria (Attachment No.7)

Column No. 4 - Pass or Fail. If column 2 > column 3, then water quality criteria is exceeded and failure occurs.

Column No. 5 - Long term average (LTA) of all tests. The summation of the 12 samples divided by 12.

Column No. 6 - The long term average concentration mixed with the receiving water IWC7Q10. This is calculated by the following equation.

$$\{ \text{LTA concentration (Col. 5)} * \text{IWC\%} \} / 100$$

Column No. 7 - Chronic allowable - Chemical Specific State Water Quality Criteria (Attachment No. 7)

Column No. 8 - Pass or Fail. If column 6 > column 7, then water quality criteria is exceeded and failure occurs.

Column No. 9 - Human health determination. Long term average (Col. 5) is mixed with the mean

annual flow (IWCMA) by the following equation.

$$(\text{LTA concentration (Col.5)} * \text{IWCMA \%}) / 100$$

Column No. 10 – Human health allowable – State Water Quality Criteria (Attachment No.8).

Note: Organisms only column is used if receiving waters are not drinking water supply.

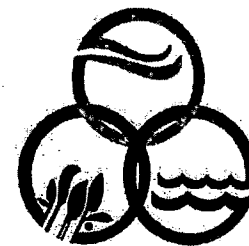
Column No. 11 - Pass or Fail. If column 9 > column 10, then water quality criteria is exceeded and failure occurs.

#### **Chemical specific analysis results**

In accordance to State Regulation WPC-1 VI.B.1b., analyses for toxic pollutants listed in Table II of Appendix D of 40 CFR 122 should be conducted as part of the renewal application. The regulations require two influent and two effluent samples be collected each month during the six-month period prior to the application submittal deadline date. Five (5) of the toxic pollutants, Cadmium, Chromium (III), Copper, Lead, and Mercury appeared to show the potential to exceed water quality criteria. Therefore, each will have limits in this draft permit. Two (2) of the toxic pollutants, silver and zinc, each had one sample which caused a failure. However, since there was only one sample that caused the failure, it is presumed that there is not reasonable potential to exceed water quality criteria. Additionally, a re-opener clause has been added to Part III.A.3 in the proposed draft permit. The re-opener clause states that the permit may be modified pending the results of a future TMDL on the receiving stream.



State of Mississippi



WATER POLLUTION CONTROL PERMIT

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

**THIS CERTIFIES**

Meridian POTW, Naval Air Station Facility  
3900 Old Highway 45 North  
Meridian, MS  
Lauderdale County

has been granted permission to conduct environmental activities as outlined herein. This permit is issued in accordance with the provisions of the Mississippi Code Annotated, and the regulations and guidelines adopted and promulgated thereunder.

**Mississippi Environmental Quality Permit Board**

---

**Mississippi Department of Environmental Quality**

Issued/Modified:

Expires:

Permit No. MS0055735

Agency Interest # 13262

\*\*\* Draft Permit \*\*\*

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**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Meridian POTW, Naval Air Station Facility

Subject Item Inventory

Permit Number:MS0055735

Activity ID No.: PER20040001

**Subject Item Inventory:**

ID	Designation	Description
AI13262	MS0055735-001	East Treatment Facility
RPNT1	MS0055735-001	Outfall 001 (Municipal Wastewater)

**Receiving Stream Relationships:**

Subject Item	Relationship	Receiving Stream
RPNT1 Outfall 001 (Municipal Wastewater)	Discharges Into	Sowashee Creek

**KEY**

ACT = Activity

AREA = Area

CONT = Control Device

IA = Insignificant Activity

RPNT = Release Point

AI = Agency Interest

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

MAFO = Animal Feeding Operation

TRMT = Treatment

\*\*\* Draft Permit \*\*\*

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**Subject Item: Outfall 001 (Municipal Wastewater)**

**RPNT0000000001: MS0055735-001**

Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Conc. / Quality Minimum	Conc. / Quality Average	Conc. / Quality Maximum	Conc. / Quality Units	Frequency	Sample Type	Which Months
Flow	17 Monthly Average	25 Monthly Maximum	pounds per day	*****	2 Monthly Average	3 Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
Flow	Report Monthly Average	Report Monthly Maximum	pounds per day	*****	Report Monthly Average	Report Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
Flow	*****	*****	*****	*****	0.0008 Monthly Average	0.0023 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec
Flow	*****	*****	*****	*****	0.015 Monthly Average	0.026 Monthly Maximum	mg/L	daily	grab sampling	Jan-Dec
Flow	*****	*****	*****	*****	0.06 Monthly Average	0.43 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec
Flow	*****	*****	*****	*****	0.0066 Monthly Average	0.0093 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec
Flow	*****	*****	*****	*****	200 Monthly Average	400 Monthly Maximum	# of colonies/100 ml	weekly	grab sampling	May-Oct
Flow	*****	*****	*****	*****	2000 Monthly Average	4000 Monthly Maximum	# of colonies/100 ml	weekly	grab sampling	Nov-Apr
Flow	1.0 Monthly Average	*****	million gallons per day	*****	*****	*****	*****	daily	calculations	Jan-Dec
Flow	*****	*****	*****	*****	0.0016 Monthly Average	0.0397 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item:    **Outfall 001 (Municipal Wastewater)**

RPNT0000000001:    **MS0055735-001**

Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Conc. / Quality Minimum	Conc. / Quality Average	Conc. / Quality Maximum	Conc. / Quality Units	Frequency	Sample Type	Which Months
	*****	*****	*****	*****	0.000016 Monthly Average	0.000028 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec
	83 Monthly Average	125 Monthly Maximum	pounds per day	*****	10 Monthly Average	15 Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
	Report Monthly Average	Report Monthly Maximum	pounds per day	*****	Report Monthly Average	Report Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
	*****	*****	*****	6.0 Minimum	*****	*****	mg/L	weekly	grab sampling	Jan-Dec
	*****	*****	*****	Report Minimum	*****	Report Maximum	mg/L	daily	grab sampling	Jan-Dec
	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	daily	grab sampling	Jan-Dec
	*****	*****	*****	*****	*****	Report Maximum	mg/L	monthly	grab sampling	Jan-Dec
	*****	*****	*****	Report Minimum	*****	Report Maximum	mg/L	daily	grab sampling	Jan-Dec
	250 Monthly Average	375 Monthly Maximum	pounds per day	*****	30 Monthly Average	45 Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
	Report Monthly Average	Report Monthly Maximum	pounds per day	*****	Report Monthly Average	Report Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec

# Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number:MS0055735

Activity ID No.: PER20040001

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## AI13262 (MS0055735-001) East Treatment Facility:

### Limitation Requirements:

Condition No.	Parameter	Condition
L-1		There shall be no discharge of floating solids or visible foam in other than trace amounts. [WPC-2 Section II.2]
L-2		The effluent shall not cause an accumulation of solids or sewage sludges in the receiving stream. [WPC-2 Section II.2]
L-3		The discharges shall not cause the occurrence of a visible sheen on the surface of the receiving waters. [WPC-2 Section II.2]
L-4		Samples taken in compliance with the monitoring requirements specified in this permit shall be taken at the nearest accessible point after final treatment but prior to mixing with the receiving stream or as otherwise specified in this permit. [WPC-1 Chapter One Section IV.A(28)]
L-5		<p>Fecal Coliform shall be sampled in accordance to the following schedule:</p> <ol style="list-style-type: none"><li>1. For the winter season, at least one sample shall be taken January - April of the calendar year and at least one sample taken November - December of the same calendar year. For the summer season, at least two samples shall be taken during May - October of the calendar year.</li><li>2. Yearly avg. is the arithmetic average of the daily fecal coliform values collected during the winter or summer season expressed as a geometric mean.</li><li>3. Yearly max. is the highest daily fecal coliform value collected during the winter or summer season expressed as a geometric mean. [Other]</li></ol>

# Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number:MS0055735

Activity ID No.: PER20040001

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## Limitation Requirements:

Condition No.	Parameter	Condition
L-6		<p>3. These chronic toxicity tests shall be initiated within 90 days of the date of issuance of the permit to evaluate wastewater toxicity. Such chronic toxicity tests shall be conducted quarterly, twice during the hot-dry season and twice during the cold-wet season, for a period of one-year following the effective date of the permit. The frequency of monitoring will be reduced to semiannually for the life of the permit. Sampling shall be timed to cover the seasonal extremes of the year (hot-dry and cold-wet).</p> <p>4. If any one chronic toxicity test indicates the IC25 is less than 75.5%, the provisions in Section 6 below shall apply, and the permittee shall conduct another chronic toxicity test(s) with the organism(s) that failed. This follow-up test must be completed within 30 days following completion of the failed test. Final chronic toxicity test results shall be in report form as outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition*. The permittee must also submit a completed Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form.</p> <p>5. In the event the permittee passes the additional WET test, the permittee shall resume testing in accordance with the testing schedule set forth in the permit. In the event the permittee fails the second WET test, the permittee shall submit a Toxicity Reduction Evaluation Plan (TREP) within 45 days following completion of the follow-up test in order to reduce the toxicity of the effluent to safe levels. The first phase of the TREP will include increased monitoring to characterize the toxicity of the effluent.</p> <p>6. If the IC25 of any test is less than 75.5%, then the effluent will be considered unacceptably chronically toxic, and this will constitute a violation of this permit. [WPC-1 Chapter One]</p>

L-7

### CHRONIC BIOASSAY REQUIREMENTS

The toxicity of the effluent as the chronic value shall be greater than or equal to 75.5% and shall be monitored as described below.

The Water Quality Standards of Mississippi require that all waters be free from substances in concentrations or combinations which are harmful to humans, animals, or aquatic life (State of Mississippi, Water Quality Criteria for Intrastate and Coastal Waters, Section II.4., Minimum Conditions Applicable to All Waters, page 3, adopted March 22, 1990). In accordance with such requirements, the permittee is authorized to discharge from outfall(s) 001 only in accordance with the following conditions:

1. The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.
2. The permittee shall perform 7-day chronic, static renewal, definitive (a control and five effluent concentrations) WET tests in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/821/R-02/013) or Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/821/R-02/014) or the most recent edition\*. [WPC-1 Chapter One]

## Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number:MS0055735

Activity ID No.: PER20040001

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### Limitation Requirements:

Condition No.	Parameter	Condition
L-8		<p>In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.7 and 40 CFR 122.61 (06-03-93).</p> <p>Contact the Mississippi Office of Pollution Control Laboratory for information on most recent edition(s) of methods manual. [WPC-1 Chapter One]</p>

### Record-Keeping Requirements:

Condition No.	Condition
R-1	<p>Recording of Results</p> <p>For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all information obtained from such monitoring including:</p> <ol style="list-style-type: none"><li>(1) The exact place, date, and time of sampling;</li><li>(2) The dates the analyses were performed;</li><li>(3) The person(s) who performed the analyses;</li><li>(4) The analytical techniques, procedures or methods used; and</li><li>(5) The results of all required analyses. [WPC-1 Chapter One Section IV.A(29)a]</li></ol>



**DRAFT**  
State of Mississippi



**WATER POLLUTION CONTROL PERMIT**

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

**THIS CERTIFIES**

Meridian POTW, Naval Air Station Facility  
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**Mississippi Department of Environmental Quality**

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\*\*\* Draft Permit \*\*\*

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Subject Item	Relationship	Receiving Stream
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CAFO = Concentrated Animal Feeding Operation

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\*\*\* Draft Permit \*\*\*

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## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item:   **Outfall 001 (Municipal Wastewater)**  
**RPNT0000000001:   MS0055735-001**

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Conc. / Quality Minimum	Conc. / Quality Average	Conc. / Quality Maximum	Conc. / Quality Units	Frequency	Sample Type	Which Months
Ammonia Nitrogen, Total (as N) Effluent	17 Monthly Average	25 Monthly Maximum	pounds per day	*****	2 Monthly Average	3 Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
Ammonia Nitrogen, Total (as N) Influent	Report Monthly Average	Report Monthly Maximum	pounds per day	*****	Report Monthly Average	Report Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
Cadmium (Total Recoverable) Effluent	*****	*****	*****	*****	0.0008 Monthly Average	0.0023 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec
Chlorine, total residual Effluent	*****	*****	*****	*****	0.015 Monthly Average	0.026 Monthly Maximum	mg/L	daily	grab sampling	Jan-Dec
Chromium (Total Recoverable) Effluent	*****	*****	*****	*****	0.06 Monthly Average	0.43 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec
Copper (Total Recoverable) Effluent	*****	*****	*****	*****	0.0066 Monthly Average	0.0093 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec
Fecal Coliform Effluent	*****	*****	*****	*****	200 Monthly Average	400 Monthly Maximum	# of colonies/100 ml	weekly	grab sampling	May-Oct
Fecal Coliform Influent	*****	*****	*****	*****	2000 Monthly Average	4000 Monthly Maximum	# of colonies/100 ml	weekly	grab sampling	Nov-Apr
Flow Effluent	1.0 Monthly Average	*****	million gallons per day	*****	*****	*****	*****	daily	calculations	Jan-Dec
Lead (Total Recoverable) Effluent	*****	*****	*****	*****	0.0016 Monthly Average	0.0397 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 001 (Municipal Wastewater)

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	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Conc. / Quality Minimum	Conc. / Quality Average	Conc. / Quality Maximum	Conc. / Quality Units	Frequency	Sample Type	Which Months
Mercury Total Discharge Effluent	*****	*****	*****	*****	0.000016 Monthly Average	0.000028 Monthly Maximum	mg/L	monthly	grab sampling	Jan-Dec
Dissolved Oxygen (DO) Effluent	83 Monthly Average	125 Monthly Maximum	pounds per day	*****	10 Monthly Average	15 Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
Dissolved Oxygen (DO) Influent	Report Monthly Average	Report Monthly Maximum	pounds per day	*****	Report Monthly Average	Report Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
Dissolved Oxygen (DO) Effluent	*****	*****	*****	6.0 Minimum	*****	*****	mg/L	weekly	grab sampling	Jan-Dec
Dissolved Oxygen (DO) In Aeration Unit	*****	*****	*****	Report Minimum	*****	Report Maximum	mg/L	daily	grab sampling	Jan-Dec
pH Effluent	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	daily	grab sampling	Jan-Dec
Sulfide Total Discharge Effluent	*****	*****	*****	*****	*****	Report Maximum	mg/L	monthly	grab sampling	Jan-Dec
Sulfide Total Discharge In Aeration Unit	*****	*****	*****	Report Minimum	*****	Report Maximum	mg/L	daily	grab sampling	Jan-Dec
Solids Total Suspended Solids Effluent	250 Monthly Average	375 Monthly Maximum	pounds per day	*****	30 Monthly Average	45 Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec
Solids Total Suspended Solids Influent	Report Monthly Average	Report Monthly Maximum	pounds per day	*****	Report Monthly Average	Report Monthly Maximum	mg/L	weekly	24-hr composite	Jan-Dec

## Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number:MS0055735

Activity ID No.: PER20040001

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### AI13262 (MS0055735-001) East Treatment Facility:

#### Limitation Requirements:

Condition No.	Parameter	Condition
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L-2		The effluent shall not cause an accumulation of solids or sewage sludges in the receiving stream. [WPC-2 Section II.2]
L-3		The discharges shall not cause the occurrence of a visible sheen on the surface of the receiving waters. [WPC-2 Section II.2]
L-4		Samples taken in compliance with the monitoring requirements specified in this permit shall be taken at the nearest accessible point after final treatment but prior to mixing with the receiving stream or as otherwise specified in this permit. [WPC-1 Chapter One Section IV.A(28)]
L-5		<p>Fecal Coliform shall be sampled in accordance to the following schedule:</p> <ol style="list-style-type: none"><li>1. For the winter season, at least one sample shall be taken January - April of the calendar year and at least one sample taken November - December of the same calendar year. For the summer season, at least two samples shall be taken during May - October of the calendar year.</li><li>2. Yearly avg. is the arithmetic average of the daily fecal coliform values collected during the winter or summer season expressed as a geometric mean.</li><li>3. Yearly max. is the highest daily fecal coliform value collected during the winter or summer season expressed as a geometric mean. [Other]</li></ol>

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## Limitation Requirements:

Condition

No.

Parameter

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L-6

3. These chronic toxicity tests shall be initiated within 90 days of the date of issuance of the permit to evaluate wastewater toxicity. Such chronic toxicity tests shall be conducted quarterly, twice during the hot-dry season and twice during the cold-wet season, for a period of one-year following the effective date of the permit. The frequency of monitoring will be reduced to semiannually for the life of the permit. Sampling shall be timed to cover the seasonal extremes of the year (hot-dry and cold-wet).

4. If any one chronic toxicity test indicates the IC25 is less than 75.5%, the provisions in Section 6 below shall apply, and the permittee shall conduct another chronic toxicity test(s) with the organism(s) that failed. This follow-up test must be completed within 30 days following completion of the failed test. Final chronic toxicity test results shall be in report form as outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition\*. The permittee must also submit a completed Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form.

5. In the event the permittee passes the additional WET test, the permittee shall resume testing in accordance with the testing schedule set forth in the permit. In the event the permittee fails the second WET test, the permittee shall submit a Toxicity Reduction Evaluation Plan (TREP) within 45 days following completion of the follow-up test in order to reduce the toxicity of the effluent to safe levels. The first phase of the TREP will include increased monitoring to characterize the toxicity of the effluent.

6. If the IC25 of any test is less than 75.5%, then the effluent will be considered unacceptably chronically toxic, and this will constitute a violation of this permit. [WPC-1 Chapter One]

L-7

### CHRONIC BIOASSAY REQUIREMENTS

The toxicity of the effluent as the chronic value shall be greater than or equal to 75.5% and shall be monitored as described below.

The Water Quality Standards of Mississippi require that all waters be free from substances in concentrations or combinations which are harmful to humans, animals, or aquatic life (State of Mississippi, Water Quality Criteria for Intrastate and Coastal Waters, Section II.4., Minimum Conditions Applicable to All Waters, page 3, adopted March 22, 1990). In accordance with such requirements, the permittee is authorized to discharge from outfall(s) 001 only in accordance with the following conditions:

1. The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.

2. The permittee shall perform 7-day chronic, static renewal, definitive (a control and five effluent concentrations) WET tests in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/821/R-02/013) or Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/821/R-02/014) or the most recent edition\*. [WPC-1 Chapter One]

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Condition No.	Parameter	Condition
L-8		<p>In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.7 and 40 CFR 122.61 (06-03-93).</p> <p>Contact the Mississippi Office of Pollution Control Laboratory for information on most recent edition(s) of methods manual. [WPC-1 Chapter One]</p>

### Record-Keeping Requirements:

Condition No.	Condition
R-1	<p>Recording of Results</p> <p>For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all information obtained from such monitoring including:</p> <ol style="list-style-type: none"><li>(1) The exact place, date, and time of sampling;</li><li>(2) The dates the analyses were performed;</li><li>(3) The person(s) who performed the analyses;</li><li>(4) The analytical techniques, procedures or methods used; and</li><li>(5) The results of all required analyses. [WPC-1 Chapter One Section IV.A(29)a]</li></ol>

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Condition

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#### S-1 Sludge Management Requirements.

- (1) General Compliance: The permittee shall comply with all existing Federal and State laws and regulations that apply to its sewage sludge use and disposal practice(s), with the Mississippi Nonhazardous Waste Management Regulations and with the CWA Section 405(d) technical standards when promulgated.
- (2) Reopener: If an applicable "acceptable management practice" or numerical limitation for pollutants in sewage sludge promulgated under Section 405(d)(2) of the Clean Water Act, as amended by the Water Quality Act of 1987, is more stringent than the sludge pollutant limit or acceptable management practice in this permit, or controls a pollutant to conform to the requirements promulgated under Section 405(d)(2). The permittee shall comply with the limitations by no later than the compliance deadline specified in the applicable regulations as required by Section 405(d)(2)(D) of the Clean Water Act.
- (3) Notice of Change in Sludge Disposal Practice: The permittee shall give prior notice to the Director of any change(s) planned in the permittee's sludge use or disposal practice.
- (4) Cause-for-Modification: 40 CFR 122.62(a)(1) provides that the following is a cause for modification but not revocation and reissuance of permits except when the permittee requests or agrees.
- (5) Alterations: There are material and substantial changes or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit. [WPC-1 Chapter One]

#### S-2 Pretreatment Requirements.

- (1) This permit shall be modified, or alternately revoked and reissued by a date to be determined to incorporate and approved municipal pretreatment program as required under Section 402(b)(8) of the Federal Water Pollution Control Act and implementing regulations or by the requirements of the approved State pretreatment program, as appropriate.
- (2) Effluent limitations from this discharge are listed in the Effluent Limitations section of this permit. If it becomes apparent that other pollutants attributable to inputs from major contributing industries using the municipal system are also present in the permittee's discharge, this permit may be revised to specify effluent limitations for any or all of such other pollutants in accordance with best practicable technology or water quality standards.
- (3) Under no circumstances shall the permittee allow introduction of the following wastes or pollutants into the waste treatment system.
  - (a) Pollutants which create a fire or explosion hazard in the treatment works;
  - (b) Pollutants which will cause corrosive structural damage to treatment works; but in no case discharges with a pH designed lower than 5.0, unless the works are specifically designed to accommodate such discharges;
  - (c) Solids or viscous substances in amounts which cause obstructions to the flow in sewer or interference with the proper operation of the treatment works;
  - (d) Wastewaters at a flow rate and/or pollutant discharge;
  - (e) Heat in amounts which will inhibit biological activity in the treatment works resulting in interference, but in no case heat in such quantities that the temperature of the influent exceeds 40 degrees Celsius (104 degrees Fahrenheit), unless approval for alternate limits has been granted by the Permit Board. [WPC-1 Chapter One]

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### Submittal/Action Requirements:

Condition No.	Condition
S-3	<p><b>Reporting</b></p> <p>Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) POSTMARKED NO LATER THAN THE 28TH DAY OF THE MONTH FOLLOWING THE COMPLETED REPORTING PERIOD. Copies of these, and all other reports required herein, shall be signed in accordance with Chapter One Sections II.C. and II.E. of the Mississippi Wastewater Permit Regulations, and shall be submitted to the Mississippi Environmental Quality Permit Board at the following address:</p> <p>Mississippi Department of Environmental Quality Office of Pollution Control P.O. Box 10385 Jackson, Mississippi 39289-0385. [WPC-1 Chapter One Section IV.A(15)c(1)]</p>
S-4	<p><b>Noncompliance Notification - Twenty-Four Hour Reporting</b></p> <p>(1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and/or prevent recurrence of the noncompliance.</p> <p>(2) The following shall be included as information which must be reported within 24 hours under this paragraph.</p> <p>(i) Any unanticipated bypass which exceeds any effluent limitation in the permit.</p> <p>(ii) Any upset which exceeds any effluent limitation in the permit.</p> <p>(iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Permit Board in the permit to be reported within 24 hours.</p> <p>(iv) The Executive Director may waive the written report on a case-by-case basis for reports under paragraph (1) of this section if the oral report has been received within 24 hours. [WPC-1 Chapter One Section IV.A(29)e]</p>
S-5	<p><b>Noncompliance Notification - Other Noncompliance</b></p> <p>The permittee shall report all instances of noncompliance not reported under the twenty-four hour reporting requirements, at the time monitoring reports are submitted or within 30 days from the end of the month in which the noncompliance occurs. The reports shall contain the same information as is required under the twenty-four hour reporting requirements contained in this permit. [WPC-1 Chapter One Section IV.A(29)f]</p>

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#### S-6 Noncompliance Notification - Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permit Board, it shall promptly submit such facts or information. [WPC-1 Chapter One Section IV.A(29)g]

#### S-7 Expiration of Permit

At least 180 days prior to the expiration date of this permit pursuant to the State law and regulation, the permittee who wishes to continue to operate under this permit shall submit an application to the Permit Board for reissuance. The Permit Board may grant permission to submit an application later than this, but no later than the expiration date of the permit. [WPC-1 Chapter One Section V.B(1)]

### Narrative Requirements:

#### Definitions:

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#### Condition

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#### T-1 Definitions: General

The permittee shall refer to WPC-1, Chapter 1, Section I.A for definitions of any permit term not specified in this permit. [WPC-1 Chapter One Section I.A]

#### T-2 Definitions: Monthly Average

"Monthly Average" means the average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during the month. The monthly average for fecal coliform bacteria is the geometric mean of "daily discharges" measured during the calendar month. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [WPC-1 Chapter One Section I.A(40)]

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### Definitions:

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T-3 Definitions: Daily Discharge

"Daily discharge" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily average" is calculated as the average measurement of the discharge of the pollutant over the day. [WPC-1 Chapter One Section I.A(14)]

T-4 Definitions: Daily Maximum

"Daily maximum" means the highest "daily discharge" over a calendar month. [WPC-1 Chapter One Section I.A(15)]

T-5 Definitions: Toxic Pollutants

"Toxic pollutants" means any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices", any pollutant identified in regulations implementing Section 405(d) of the Clean Water Act. [WPC-1 Chapter One Section I.A]

T-6 Definitions: Hazardous Substances

"Hazardous substances" are defined in 40 CFR 116.4. [40 CFR 116.4]

T-7 Definitions: Quarterly Average

"Quarterly Average" means the average of "daily discharges" over a three month period, calculated as the sum of all "daily discharges" measured during the quarter divided by the number of "daily discharges" measured during the quarter. The quarterly average for fecal coliform bacteria is the geometric mean of "daily discharges" measured during the quarter. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [WPC-1 Chapter One Section I.A(26)]

T-8 Definitions: Quarterly Maximum

"Quarterly Maximum" means the highest "daily discharge" measured over a three-month period. [WPC-1 Chapter One Section I.A(57)]

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### Narrative Requirements:

#### Definitions:

Condition No.	Condition
T-9	<p>Definitions: Yearly Average</p> <p>"Yearly Average" means the average of "daily discharges" over a calendar year, calculated as the sum of all "daily discharges" measured during the calendar year divided by the number of "daily discharges" measured during the calendar year. The yearly average for fecal coliform bacteria is the geometric mean of "daily discharges" during the calendar year. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [WPC-1 Chapter One Section I.A(77)]</p>
T-10	<p>Definitions: Yearly Maximum</p> <p>"Yearly Maximum" means the highest "daily discharge" measured over a calendar year. [WPC-1 Chapter One Section I.A(78)]</p>
Condition No.	Condition
T-11	<p>The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule: Upon Permit Issuance. [WPC-1 Chapter One Section IV.A(9)]</p>
T-12	<p>No later than 10 days following the date of compliance specified by this permit, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement. [WPC-1 Chapter One Section IV.A(10)]</p>
T-13	<p>Change in Discharge</p> <p>All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions or treatment modifications which result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application. If such changes will not violate the effluent limitations to the Mississippi Environmental Quality Permit Board, the permit may be modified to specify and limit any pollutants not previously limited. [WPC-1 Chapter One Section IV.A]</p>

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Condition No.	Condition
T-14	<p><b>Adverse Impacts</b></p> <p>The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. [WPC-1 Chapter One Section IV.A(19)]</p>
T-15	<p>The permittee shall provide written notification to the Mississippi Commission on Environmental Quality no later than thirty (30) days after the loss of the permittee's certified operator. [WPC-1 Chapter One]</p>
T-16	<p><b>Representative Sampling</b></p> <p>Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored wastewater. [WPC-1 Chapter One Section IV.A(28)e]</p>
T-17	<p><b>Reporting</b></p> <p>If the results for a given sample analysis are such that any parameter (other than fecal coliform) is not detected at or above the minimum level for the test method used, a value of zero will be used for that sample in calculating an arithmetic mean value for the parameter. If the resulting calculated arithmetic mean value for that reporting period is zero, the permittee shall report "NODI = B" on the DMR. For fecal coliform, a value of 1.0 shall be used in calculating the geometric mean. If the resulting fecal coliform mean value is 1.0, the permittee shall report "NODI = B" on the DMR. For each quantitative sample value that is not detectable, the test method used and the minimum level for that method for that parameter shall be attached to and submitted with the DMR. The permittee shall then be considered in compliance with the appropriate effluent limitation and/or reporting requirement. [WPC-1 Chapter One Section II.G]</p>
T-18	<p><b>Reporting</b></p> <p>If the permittee monitors any pollutant as prescribed in the permit more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Permit Board. [WPC-1 Chapter One Section IV.A(15)c(2)]</p>
T-19	<p><b>Reporting</b></p> <p>Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Permit Board in the permit. [WPC-1 Chapter One Section IV.A(15)c(3)]</p>

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T-20	<p>Test Procedures</p> <p>Test procedures for the analysis of pollutants shall include those set forth in 40 CFR 136 or alternative procedures approved and/or promulgated by EPA. [WPC-1 Chapter One Section IV.A(30)]</p>
T-21	<p>Records Retention</p> <p>All records and results of monitoring activities required by this permit, including calibration and maintenance records, shall be retained by the permittee for a minimum of three (3) years, unless otherwise required or extended by the Permit Board, copies of which shall be furnished to the Department upon request. [WPC-1 Chapter One Section IV.A(29)a]</p>
T-22	<p>Falsifying Reports</p> <p>Any permittee who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required by the Permit Board to be maintained as a condition in a permit, or who alters or falsifies the results obtained by such devices or methods and/or any written report required by or in response to a permit condition, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for a violation of a permit condition pursuant to Section 49-17-43 of the Code. [WPC-1 Chapter One Section IV.A(29)d]</p>
T-23	<p>Duty to Comply</p> <p>The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [WPC-1 Chapter One Section IV.A(2)]</p>
T-24	<p>Proper Operation, Maintenance and Replacement</p> <p>The permittee shall at all times properly operate, maintain, and when necessary, promptly replace all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. Proper replacement includes maintaining an adequate inventory of replacement equipment and parts for prompt replacement when necessary to maintain continuous collection and treatment of wastewater. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [WPC-1 Chapter One Section IV.A(18)]</p>

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Condition No.	Condition
T-25	<p><b>Duty to Mitigate</b></p> <p>The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. [WPC-1 Chapter One Section IV.A(19)]</p>
T-26	<p><b>Bypassing</b></p> <p>The permittee shall comply with the terms and conditions regarding bypass found in 40 CFR 122.41(m). [40 CFR 122.41(m)]</p>
T-27	<p><b>Bypassing - Definitions</b></p> <p>"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.</p> <p>"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. [40 CFR 122.41(m)]</p>
T-28	<p><b>Bypassing - Bypass not exceeding limitations</b></p> <p>The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the notice and prohibition provisions of the bypass requirements in this permit. [40 CFR 122.41(m)]</p>
T-29	<p><b>Bypassing -Notice</b></p> <p>Anticipated bypass- If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.</p> <p>Unanticipated bypass- The permittee shall submit notice of an unanticipated bypass as required by the twenty-four hour reporting requirements set forth in this permit. [40 CFR 122.41(m)]</p>

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Condition No.	Condition
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T-30	Bypassing- Prohibition of Bypass
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(1) Bypass is prohibited, and the Commission may take enforcement action against a permittee unless:

(i) Bypass was unavoidable to prevent loss of life, personal injury, or sever property damage.

(ii) There was no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

(iii) The permittee submitted notices as required under the Twenty-Four Hour reporting requirements set forth in this permit.

(2) The Commission may approve an anticipated bypass, after considering its adverse affects, if the Commission determines that it will meet the three conditions listed above in paragraph (1) of this permit condition. [40 CFR 122.41(m)]

T-31	Upsets
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The permittee shall meet the conditions of 40 CFR 122.41(n) regarding "Upsets" and as in the upset requirements of this permit. [WPC-1 Chapter One Section IV.A(27)]

T-32	Upsets- Definition
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"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. [WPC-1 Chapter One Section IV.A(27)]

T-33	Upsets - Effect of an Upset
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An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the "conditions necessary for demonstration of upset" requirements of this permit are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, shall not constitute final administrative action subject to judicial review. [WPC-1 Chapter One Section IV.A(27)]

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Condition No.	Condition
T-34	<p>Upsets - Conditions necessary for demonstration of upset</p> <p>A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:</p> <ol style="list-style-type: none"><li>(1) An upset occurred and that the permittee can identify the cause(s) of the upset;</li><li>(2) The permitted facility was at the time being properly operated;</li><li>(3) The permittee submitted notice of the upset as required in 40 CFR 122.41(L)(6)(ii)(B)(24-hour notice of noncompliance); and</li><li>(4) The permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate). [WPC-1 Chapter One Section IV.A(27)]</li></ol>
T-35	<p>Upsets - Burden of proof</p> <p>In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof. [WPC-1 Chapter One Section IV.A(27)]</p>
T-36	<p>Removed Substances</p> <p>Solids, sludges, filter backwash, or other residuals removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent such materials from entering State waters and in a manner consistent with the Mississippi Solid Waste Disposal Act, the Federal Resource Conservation and Recovery Act, and the Mississippi Water Pollution Control Act. [WPC-1 Chapter One Section IV.A(21)]</p>
T-37	<p>Power Failures</p> <p>If electric power is required, in order to maintain compliance with the conditions and prohibitions of the permit, the permittee shall either:</p> <ol style="list-style-type: none"><li>(1) Provide an alternative power source to operate the wastewater control facilities; or, if such alternative power source is not in existence, and no date for its implementation appears in the permit,</li><li>(2) Halt, reduce, or otherwise control production and/or all wastewater flows upon reduction, loss, or failure of the primary source of power to the wastewater control facilities. [WPC-1 Chapter One Section IV.A(22)]</li></ol>

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Condition No.	Condition
T-38	<p>Inspection and Entry</p> <p>The permittee shall allow any authorized Commission representative to enter the permittee's premises at any reasonable time, to have access to and copy any applicable records, to inspect process facilities, treatment works, monitoring methods or equipment or to take samples, as authorized by Section 49-17-21 of the Code. In the event of investigation during an emergency response action, a reasonable time shall be any time of the day or night. Follow-up investigations subsequent to the conclusion of the emergency event shall be conducted at reasonable times. [WPC-1 Chapter One Section IV.A(17)]</p>
T-39	<p>Transfer of Ownership or Control</p> <p>This permit is not transferable to any person without proper modification of this permit following procedures found in WPC-1, Chapter 1, Section V.C. [WPC-1 Chapter One Section V.C]</p>
T-40	<p>Signatory Requirements</p> <p>All applications, reports, or information submitted to the Permit Board shall be signed and certified. [WPC-1 Chapter One Section II.C]</p>
T-41	<p>Signatory Requirements - Application Signatures</p> <p>All permit applications shall be signed as follows:</p> <p>(1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (i) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making function for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding 25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.</p> <p>(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or</p> <p>(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. [WPC-1 Chapter One Section II.C]</p>

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# Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number:MS0055735

Activity ID No.: PER20040001

Page 15 of 19

## Narrative Requirements:

Condition No.	Condition
T-42	<p>Signatory Requirements -Reports and Other Information</p> <p>All reports required by the permit and other information requested by the Permit Board shall be signed by a person described by the application signature requirements in this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:</p> <p>(1) The authorization is made in writing by a person described by the application signature requirements;</p> <p>(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and</p> <p>(3) The written authorization is submitted to the Permit Board. [WPC-1 Chapter One Section II.C]</p>
T-43	<p>Signatory Requirements - Changes to Authorization</p> <p>If an authorization under the signatory requirements of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the signatory requirements of this permit must be submitted to the Permit Board prior to or together with any reports, information, or applications. [WPC-1 Chapter One Section II.C]</p>
T-44	<p>Signatory Requirements - Certification</p> <p>Any person signing a document under the signatory requirements stated in this permit shall make the following certification:</p> <p>"I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [WPC-1 Chapter One Section II.C]</p>
T-45	<p>Availability of Records</p> <p>Except for information deemed to be confidential under the Mississippi Code Ann. 49-17-39 and 40 CFR 123.41, file information relating to this permit shall be made available for public inspection and copying during normal business hours at the office of the Department of Environmental Quality in Jackson, Mississippi. Written request must be provided in accordance with policies developed by the Commission and must state, specifically, records proposed for review, date proposed for review and copying requirements. [WPC-1 Chapter One Section III.E]</p>

## Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number:MS0055735

Activity ID No.: PER20040001

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### Narrative Requirements:

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Condition No.	Condition
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T-46	Duty to Provide Information
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The permittee shall furnish to the Permit Board within a reasonable time any relevant information which the Permit Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. The permittee shall also furnish to the Permit Board upon request, copies of records required to be kept by the permit. [WPC-1 Chapter One Section IV.A(16)]

T-47	Toxic Pollutants
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The permittee shall comply with any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) established under Section 307(a) of the Federal Water Pollution Control Act. [WPC-1 Chapter One Section IV.A(26)]

T-48	Toxic Pollutants Notification Requirements
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The permittee shall comply with the applicable provisions of 40 CFR 122.42. [WPC-1 Chapter One Section IV.A(26)]

T-49	Civil and Criminal Liability
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- (1) Any person who violates a term, condition or schedule of compliance contained within this permit or the Mississippi Water Pollution Control Law is subject to the actions defined by law.
- (2) Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.
- (3) It shall not be the defense of the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WPC-1 Chapter One Section IV.A(24)]

T-50	Oil and Hazardous Substance Liability
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Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Federal Water Pollution Control Act and applicable provisions under Mississippi Law pertaining to transportation, storage, treatment, or spillage of oil or hazardous substances. [WPC-1 Chapter One Section IV.A(23)]

T-51	Property Rights
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The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations. [WPC-1 Chapter One Section V.E]

# Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number:MS0055735

Activity ID No.: PER20040001

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## Narrative Requirements:

Condition No.	Condition
T-52	<p>Severability</p> <p>The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. [WPC-1 Chapter One Section IV.A(25)]</p>
T-53	<p>Protection of Confidential Information</p> <p>(1) Pursuant to Miss. Code Ann. ' 49-17-39 and 40 CFR 123.41, the Permit Board shall make available to the public all information contained on any form and all public comments on such information. Effluent data and information concerning air or water quality shall also be made available to the public. Information that is determined by the Commission to be trade secrets shall not be disclosed to the public without prior consent of the source of such information. When a claim of confidentiality is made by a person in accordance with the provisions of Miss. Code Ann. ' 49-17-39, a recommendation on the questions of confidentiality shall be made by the Commission and forwarded to the Regional Administrator (or his/her designee) of EPA for his concurrence in such determination of confidentiality. [WPC-1 Chapter One Section III.F]</p>
T-54	<p>Protection of Confidential Information- continued</p> <p>(2) A copy of a State, UIC, or NPDES permit application, public notice, fact sheet, draft permit and other forms relating thereto, including written public comment and other reports, files and information relating to the application not classified as confidential information by the Commission pursuant to part (1) of this requirement, shall be available for public inspection and copying during normal business hours at the office of the Department in Jackson, Mississippi. [WPC-1 Chapter One Section III.F]</p>
T-55	<p>Protection of Confidential Information- continued</p> <p>(3) Upon determination by the Commission that information submitted by a permit applicant is entitled to protection against disclosure as trade secrets, the information shall be so labeled and otherwise handled as confidential. Copies of the information and a notice of the Commission's action shall be forwarded to the Regional Administrator (or his/her designee). In making its determination of entitlement to protection as a trade secret, the Commission shall follow the procedure set forth in Miss. Code Ann. ' 49-17-39. In the event the Commission denies the claim of confidentiality, the applicant shall have, upon notification thereof, the right to appeal the Commission's determination in the same manner provided for other orders of the Commission. No disclosure, except to EPA, shall be allowed until any appeal from the determination of the Commission is completed. [WPC-1 Chapter One Section III.F]</p>

## Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number:MS0055735

Activity ID No.: PER20040001

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### Narrative Requirements:

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#### Condition

##### No. Condition

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#### T-56 Spill Prevention and Best Management Plans

Any permittee which has above ground bulk storage capacity, of more than 1320 gallons or any single container with a capacity greater than 660 gallons, of materials and/or liquids (including but not limited to, all raw, finished and/or waste material) with chronic or acute potential for pollution impact on waters of the State and not subject to Mississippi Hazardous Waste Management Regulations or 40 CFR 112 (Oil Pollution Prevention) regulations shall provide secondary containment as found in 40 CFR 112 or equivalent protective measures such as trenches or waterways which would conduct any tank releases to a permitted treatment system or sufficient equalization or treatment capacity needed to prevent chronic/acute pollution impact. [WPC-1 Chapter One Section IV.A(12)a]

#### T-57 Reopener Clause

This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation or storm water regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation or regulation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit; or
3. This permit shall be modified to reflect any additional or otherwise more stringent limitations and additional monitoring as determined to be necessary by the results of a Completed TMDL. [WPC-1 Chapter One Section IV.F(1)]

#### T-58 Closure Requirements

Should the permittee decide to permanently close and abandon the premises upon which it operates, it shall provide a Closure Plan to the Permit Board no later than 90 days prior to doing so. This Closure Plan shall address how and when all manufactured products, by-products, raw materials, stored chemicals, and solid and liquid waste and residues will be removed from the premises or permanently disposed of on site such that no potential environmental hazard to the waters of the State will be presented. Closure plan(s) submitted to and approved by Mississippi Department of Environmental Quality for compliance with other environmental regulations will satisfy the closure requirements for those items specifically addressed in the closure plan(s) as long as the closure does not present a potential for environmental hazard to waters of the State. [WPC-1 Chapter One Section IV.A(11)]

**Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System**

Meridian POTW, Naval Air Station Facility

Facility Requirements

Permit Number:MS0055735

Activity ID No.: PER20040001

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**RPNT1 (MS0055735-001) Outfall 001 (Municipal Wastewater):**

**Submittal/Action Requirements:**

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Condition No.	Condition
S-1	The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [WPC-1 Chapter One IV.A(15)c]

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## GENERAL INFORMATION

Meridian POTW, Naval Air Station Facility  
3900 Old Highway 45 North  
Meridian, MS  
Lauderdale County

### Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
13262	Meridian POTW, Naval Air Station Facility	Official Site Name	9/28/1999	
MS0055735	Meridian POTW, Naval Air Station Facility	Water-NPDES	9/28/1999	9/27/2004

**Basin:** Pascagoula River Basin

**Latitude:** 32° 32' 59" 7 tenths

**Longitude:** 88° 35' 39" 5 tenths

**Location Description:** PG - Plant Entrance (General). Entrance to facility. Data collected by Chuck Gray 6/3/03.

**Relevant Documents:** Form 2A, Cover Letter and a Basic Application Form

**Emissions Inventory ID:** 248107

\*\*\* Draft Permit \*\*\*

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**FACT SHEET**

**APPLICATION FOR  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
PERMIT TO DISCHARGE WASTEWATER TO WATERS  
OF THE STATE OF MISSISSIPPI  
July 13, 2004**

Application No.: MS0055735

**1. SYNOPSIS OF APPLICATION**

**a. Name and Address of Applicant**

Meridian POTW, Naval Air Station Facility  
PO Box 1430  
Meridian, Mississippi 39302-1430

**b. Description of Applicant's Operation**

The collection and treatment of municipal wastewater

**c. Production Capacity of Facility**

1.0 MGD

**d. Description of Existing Pollution Abatement Facilities**

Treatment via a sequencing batch reactor (SBR) followed by UV disinfection and post-aeration.

**e. Applicant's Receiving Water**

Sowashee Creek.

The 2002 State of Mississippi's 303(d) List of Waterbodies, Section A., denotes the Sowashee Creek drainage area, Waterbody ID Number: MS061, located in Lauderdale County (At Meridian from headwaters to mouth at Okatibbee Creek), to be evaluated for aquatic life support due to biological impairment.

**f. Description of Discharges**

Outfall 001 is permitted to discharge a monthly average 1.0 MGD of biologically treated domestic wastewater.

**2. PROPOSED EFFLUENT LIMITATIONS**

13262 PER20040001

See Draft Permit

3. MONITORING REQUIREMENTS

The applicant will be required to monitor regularly for flow and those parameters limited in Section 2 above with sufficient frequency to ensure compliance with the permit conditions. Frequency, methods of sampling, and reporting dates will be specified in the final permit.

4. PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS

Beginning the issuance date of this permit, the permittee shall achieve compliance with the effluent limitations specified in the draft permit.

5. PROPOSED CONDITIONS OF APPLICABILITY AND OTHER REQUIREMENTS

The applicant will be required at all times to operate facilities as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants.

The permittee shall provide an adequate operate staff which is duly qualified to carry out the operation, maintenance and testing functions required to insure compliance specified in the permit.

Maintenance of treatment facilities that result in degradation of effluent quality shall be scheduled during noncritical water quality period and shall be carried out in a manner approved by the Mississippi Office of Pollution Control.

The permittee is required to submit information of a periodic basis on the quality and quantity of effluent introduced into the facility by major contributing industries.

6. WATER QUALITY STANDARDS AND EFFLUENT STANDARDS APPLIED TO THE DISCHARGE

Sowashee Creek is classified as Fish and Wildlife. Limitations were developed through empirical modeling. Additionally, WET test results demonstrated that limits for cadmium, copper, lead, mercury, and chromium are necessary; thus, limits were incorporated in this permit draft.

7. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Mississippi Office of Pollution Control Permit Board proposes to issue an NPDES permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Interested persons are invited to submit written comments on the permit application or on the Permit Board's proposed determinations to the following address:

Mississippi Department of Environmental Quality  
Office of Pollution Control  
P. O. Box 10385  
Jackson, Mississippi 39289-0385

Additional details about the application and the proposed determination, a sketch showing the location of the discharge, and a copy of the draft permit are available by writing Chad Winter at the Permit Board's address or calling 961-5171.

All comments received prior to the end of Public Notice Date will be considered in the formulation of final determinations with regard to this application.

**b. Public Hearing**

The Permit Board may hold a public hearing if there is a significant degree of public interest in a proposed permit or group of permits. Public notice of such a hearing will be circulated in newspapers in the geographical area of the discharge and to those on the agency's mailing list at least 30 days prior to the hearing.

Following the public hearing, the Permit Board may take such modifications in the terms and conditions of the proposed permits as may be appropriate and shall issue or deny the permit. Notice of issuance or denial will be circulated to those who participated in the hearing and to appropriate persons on the mailing list.

**c. Issuance of the Permit When No Public Hearing is Held**

If no public hearing is held, and, after review of the comments received, the Permit Board's determinations are substantially unchanged, the permit will be issued and become effective immediately.

If no public hearing is held, but there have been substantial changes, public notice of the Permit Board's revised determinations will be made. Following a 30-day comment period, the permit will be issued and become effective immediately, unless a public hearing is granted.

# ANTIDEGRADATION POLICY REVIEW CHECKLIST

8/27/77  
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## Facility/Waterbody ID

1. Facility Name: Meridian POTW - North Facility
2. NPDES Permit No.: MS00 55735 Outfall Serial No.: 001
3. County: Lauderdale
4. Name of Receiving Waterbody R.M. 11.5 of Sowashoe Creek
5. Use Classification: FISH AND WILDLIFE

## Applicability of Antidegradation Policy

6. Is this a new or expanding discharge? If yes, continue.
7. Does background water quality exceed Criteria? Yes ✓ No     If yes, continue.
8. Does discharge lower water quality from background levels? Yes ✓ No     If yes, continue.

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Alternatives Analysis

9. Does a feasible alternative exist which would avoid water quality degradation? Yes     No ✓ If yes, reevaluate proposed permit. If no, continue.  
 (Alternatives to be considered include, but are not limited to, no discharge system, connection to an existing wastewater treatment facility, an alternative discharge point, product or raw material substitution, and other treatment options.)

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

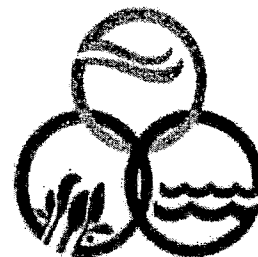
## Socio-Economics vs. Water Quality Issues

10. Are there any socio-economic or environmental/public health issues which would justify the proposed degradation. Yes X No     If yes, continue.

Comments: This moves the current NAS discharge, picks up septic tank users & has the potential to take additional NPDES discharges off-line. This project enhances the viability of the NAS; NAS is a major employer, and its closure would have severe adverse impacts on the community.



State of Mississippi



**WATER POLLUTION CONTROL PERMIT**

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

**THIS CERTIFIES**

Meridian POTW, Naval Air Station Facility  
3900 Old Highway 45 North  
Meridian, MS  
Lauderdale County

has been granted permission to conduct environmental activities as outlined herein. This permit is issued in accordance with the provisions of the Mississippi Code Annotated, and the regulations and guidelines adopted and promulgated thereunder.

Mississippi Environmental Quality Permit Board

Mississippi Department of Environmental Quality

Issued/Modified: SEP 16 2004

Expires: AUG 31 2009

Permit No. MS0055735

Agency Interest # 13262

FACILITY: Meridian POTW - NAS  
IWC (%) = 75.5

PERMIT No: MS0055735  
MA (%) = 75.5

# CHEMICAL SPECIFIC SCREENING CALCULATION SHEET

\*\*\*USED IWC WHICH IS WORSE CASE THAN MA, HOWEVER IF NEEDED WILL USE MA\*\*\*

PARAMETER	[1] Max. Conc. (mg/l)	[2] Max. Downstream Conc. (mg/l) *	[3] Acute Criteria Allowable (mg/l)	[4] Pass or Fail	[5] Long Term Average of all Tests (mg/l)	[6] LTA Downstream Conc. (mg/l) **	[7] Chronic Criteria Allowable (mg/l)	[8] Pass or Fail	[9] LTA Downstream Conc. (mg/l) ***	[10] Human Health Allowable (mg/l)	[11] Pass or Fail
Antimony	0	0	0.0085	PASS	0	0	0	PASS	0	0	PASS
Arsenic	0	0	0.34	PASS	0	0	0.15	PASS	0	0.0000175	PASS
Beryllium	0	0	0.00005	PASS	0	0	0	PASS	0	0	PASS
Cadmium	0.021	0.015855	0.00174	FAIL	0.00275	0.00207625	0.00062	FAIL	0.0021	0.01	PASS
Chromium, (III)	0.4	0.302	0.323	PASS	0.0988	0.074594	0.042	FAIL	0.0746	33.3	PASS
Chromium, Hex.	0	0	0.016	PASS	0	0	0.011	PASS	0	0.05	PASS
Copper	0.018	0.01359	0.007	FAIL	0.0048	0.003624	0.005	PASS	0.0036	1	PASS
Lead	1.45	1.09475	3.00E-02	FAIL	0.8217	0.6203835	0.00118	FAIL	0.6204	0.05	FAIL
Mercury	0.000761	0.000574555	0.0021	PASS	0.000345	0.000260475	0.000012	MONITOR	0.0003	0.000151	FAIL
Nickel	0.15	0.11325	0.26	PASS	0.0256	0.019328	0.029	PASS	0.0193	0.607	PASS
Selenium	0	0	0.0118	PASS	0	0	0.0046	PASS	0	0.01	PASS
Silver	0.001	0.000755	0.00105	PASS	0.00008	0.0000604	0	MONITOR	0.0001	0.05	PASS
Thallium	0	0	0.007	PASS	0	0	0	PASS	0	0	PASS
Zinc	0.115	0.086825	0.065	FAIL	0.04	0.0302	0.065	PASS	0.0302	5	PASS
Cyanide	0	0	0.022	PASS	0	0	0.0052	PASS	0	0.2	PASS
Phenol	0	0	0.3	PASS	0	0	0.102	PASS	0	0.3	PASS
Penta	0	0	0.0087	PASS	0	0	0.0067	PASS	0	0.03	PASS
P-Chloro-M-Cresol	0	0	—	—	0	0	—	—	0	—	—
2-Chlorophenol	0	0	—	—	0	0	—	—	0	—	—
2,4-Dichlorophenol	0	0	—	—	0	0	—	—	0	0.4	PASS
2,4-Dimethylphenol	0	0	—	—	0	0	—	—	0	0.79	PASS
4,6-Dinitro-O-Cresol	0	0	—	—	0	0	—	—	0	2.3	PASS
2,4-Dinitrophenol	0	0	—	—	0	0	—	—	0	0.765	PASS
2-Nitrophenol	0	0	—	—	0	0	—	—	0	14	PASS
4-Nitrophenol	0	0	—	—	0	0	—	—	0	—	—
2,4,6-Trichlorophenc	0	0	—	—	0	0	—	—	0	—	—
									0	0.0065	PASS

\* Max. Conc. X IWC/100

\*\* LTA X IWC/100

\*\*\* LTA X MA/100

Notes:

ND denotes a value that is non-detected and/ or is given a value of zero.

The IWC is simply the percentage of the receiving stream's flow that the applicant uses during low flow conditions.

The MA is the percentage of the receiving stream's flow that the applicant uses during average flow conditions.

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**TABLE 1**  
**Numeric Criteria for All Waters ( $\mu\text{g/L}$ )**

Parameter	Fresh Water		Salt Water		Human Health	
	Acute	Chronic	Acute	Chronic	Organisms Only	Water & Organisms
Aldrin	3.0		1.3		0.00014	0.00013
Ammonia	g	g	g	g		
Arsenic (III), Total Dissolved	340 <sup>f</sup>	150 <sup>f</sup>	69	36		
Arsenic, Total Dissolved					24 <sup>i</sup>	0.078 <sup>i</sup>
Cadmium, Total Dissolved	1.74 <sup>b,f</sup>	0.62 <sup>b,f</sup>	43	9.3	168	5
Chlordane	2.4	0.0043	0.09	0.004	0.0022	0.0021
Chlorine	19	11	13	7.5		
Chromium (Hex), Total Dissolved	16 <sup>i</sup>	11 <sup>i</sup>	1100	50	1470	98
Chromium (III), Total Dissolved	323 <sup>b,i</sup>	42 <sup>b,i</sup>			140468	100
Copper, Total Dissolved	7.0 <sup>b,i</sup>	5.0 <sup>b,i</sup>	4.8	3.1	1000	1000
Cyanide	22.0 <sup>h</sup>	5.2 <sup>h</sup>	1.0 <sup>h</sup>	1.0 <sup>h</sup>	220000	200
4,4 DDT	1.1	0.001	0.13	0.001	0.00059	0.00059
Dieldrin	0.24	0.056	0.71	0.0019	0.000144	0.000135
2,3,7,8 TCDD					1.0 ppq <sup>d</sup>	1.0 ppq <sup>d</sup>
Endosulfan	0.22 <sup>j</sup>	0.056 <sup>j</sup>	0.034 <sup>j</sup>	0.0087 <sup>j</sup>	240 <sup>k</sup>	110 <sup>k</sup>
Endrin	0.086	0.036	0.037	0.0023	0.814	0.76
Heptachlor	0.52	0.0038	0.053	0.0036	0.000214	0.000208

*Handwritten signature*  
12/1/77

Parameter	Fresh Water		Salt Water		Human Health	
	Acute	Chronic	Acute	Chronic	Organisms Only	Water & Organisms
Hexachlorocyclohexane(Lindane)	0.95	0.08	0.16	-	0.0625	0.0186
Lead, Total Dissolved	30 <sup>b,i</sup>	1.18 <sup>b,i</sup>	210	8.1		15
Mercury (II), Total Dissolved	2.1 <sup>i</sup>	0.012	1.8	0.025		
Mercury					0.153	0.151
Nickel, Total Dissolved	260 <sup>b,i</sup>	29 <sup>b,i</sup>	75	8.3	4584	607
			167 <sup>e</sup>	18.5 <sup>e</sup>		
Phenol	300	102	300	58	300	300
Pentachlorophenol	8.7 <sup>e</sup>	6.7 <sup>e</sup>	13 <sup>e</sup>	7.9 <sup>e</sup>	8.2	0.28
PCB 1242	0.2	0.014	1.0	0.03		
PCB 1254	0.2	0.014	1.0	0.03		
PCB 1221	0.2	0.014	1.0	0.03		
PCB 1232	0.2	0.014	1.0	0.03		
PCB 1248	0.2	0.014	1.0	0.03		
PCB 1260	0.2	0.014	1.0	0.03		
PCB 1016	0.2	0.014	1.0	0.03		
Total PCB					0.00035	0.00035
Selenium, Total Dissolved	11.8 <sup>a,i</sup>	4.6 <sup>i</sup>	290 <sup>i</sup>	71 <sup>i</sup>	3365	50
Silver, Total Dissolved	1.05 <sup>b,f</sup>		1.9			100
Toxaphene	0.73	0.0002	0.21	0.0002	0.00075	0.00073
Zinc, Total Dissolved	65 <sup>b,i</sup>	65 <sup>b,i</sup>	90	81	5000	5000

# PERMIT RATIONALE FOR REISSUANCE

Meridian POTW, Naval Air Station Facility  
 Lauderdale County  
 Meridian, Mississippi  
 Water NPDES No. MS0055735  
 June 3, 2004

## CLASSIFICATION – Municipal Major

1. DESCRIPTION OF WASTEWATER - Municipal Domestic
2. DESCRIPTION OF WASTEWATER TREATMENT- Wastewater is collected and treated via a sequencing batch reactor (SBR) followed by UV disinfection and post-aeration. See attachment No. 1 for flow schematic.
3. RECEIVING WATERS – Sowashee Creek. The 2002 State of Mississippi's 303(d) List of Waterbodies, Section A., denotes the Sowashee Creek drainage area, Waterbody ID Number: MS061, located in Lauderdale County (At Meridian from headwaters to mouth at Okatibbee Creek), to be evaluated for aquatic life support due to biological impairment. Sowashee Creek is classified as Fish and Wildlife.
4. The 7Q10 of the receiving stream at the point of discharge of the POTW is 0.5 cfs. The discharge point is located within the Pascagoula Basin. See attachment No. 2 for discharge location map.

The instream wastewater concentration (IWC)7Q10 at the point of discharge is determined by the following calculation:

$$IWC_{7Q10} = \frac{Q_w}{Q_r + Q_w} * 100$$

Where,  $Q_w$  = Design flow of the wastewater treatment facility  
 $Q_r$  = Receiving stream 7Q10

IWC calculation for the Meridian-NAS POTW is as follows:

$Q_w$  = 1.0 MGD or 1.55 cfs  
 $Q_r$  = 0.5 cfs

$$\frac{1.55 \text{ cfs}}{0.5 \text{ cfs} + 1.55 \text{ cfs}} * 100 = 75.6\%$$

5. SUMMARY AND BASIS OF DISCHARGE LIMITATIONS

<u>Parameter</u>	<u>Value</u>	<u>Basis</u>
Flow	1.0 MGD	Design
BOD5	10 / 15 mg/l	Modeled
TSS	30 mg/l / 45 mg/l	Technology Based
Fecal Coliform (May-Oct.)	200 / 400 col. / 100ml	MSWQS
(Nov.-Apr.)	2,000/4,000 col. / 100ml	MSWQS
pH	6.0 - 9.0 SU	MSWQS
NH <sub>3</sub> -N	2 / 3 mg/l	Modeled
Dissolved Oxygen	>6.0 mg/l	Modeled
Chlorine	0.015 / 0.02 mg/l	Modeled
Cadmium	0.0008 / 0.0023 mg/l	Modeled
Copper	0.0066 / 0.0093 mg/l	Modeled
Lead	0.0016 / 0.0397 mg/l	Modeled
Mercury	0.000016 / 0.0028 mg/l	Modeled
Chromium, (III)	0.06 / 0.43 mg/l	Modeled

See attached modeling data results Attachment No. 3.

Note: MSWQS = Mississippi State Water Quality Standards

6. Bioassay and Chemical Specific Evaluation

**Bioassay**

In accordance to State Regulation WPC-1 VI.B.2b., a whole effluent toxicity evaluation was performed as part of the renewal application. The applicant tested in accordance with "Long-Term Methods for estimating the chronic toxicity of Effluents and Receiving Water to Freshwater organisms". Long-term chronic WET tests were performed on ceriodaphnia dubia (invertebrates) and pimephales promelas (vertebrates). The WET tests on the species were performed in February 2004 and April 2004. Results of the WET tests are as follows and are included as attachment No. 4:

February 2004

<u>Species</u>	<u>IC25 Growth Results</u>
Ceriodaphnia Dubia	12.71%

Pimephales Promelas >100%

April 2004

<u>Species</u>	<u>IC25 Growth Results</u>
Ceriodaphnia Dubia	5.38%
Pimephales Promelas	>100%

Since the inhibition concentrations were less than the IWC of 75.6%, it is presumed that the effluent is toxic to the receiving waters. Additionally, only two sets of bioassays were performed versus the four sets that the application requires. Regardless, additional bioassays will be required due to failures. This requirement can be found in Part III.C.

### Chemical Specific Analysis

Chemical specific analysis has been performed in accordance with State Regulations WPC-1 V1.B1. Municipalities shall determine the toxic characteristics of their wastewater by analyzing for the toxic pollutant listed in Table III of Appendix D of 40 CFR 122. The results are tabulated in attachment No. 5. The reported values are then analyzed and compared to water quality criteria to determine any possible toxic effect to the receiving waters. A synopsis of these calculations is listed in attachment No. 6. A column by column description of the calculations in attachment No. 6 is hereby provided:

Column No. 1 - Maximum concentration. The highest effluent reading of the parameter

Column No. 2 - The maximum concentration mixed with the receiving water IWC7Q10. This is calculated by the following equation.

$$\{ \text{Maximum concentration (Col. 1)} * \text{IWC}\% \} / 100$$

Column No. 3 - Acute allowable - Chemical Specific State Water Quality Criteria (Attachment No.7)

Column No. 4 - Pass or Fail. If column 2 > column 3, then water quality criteria is exceeded and failure occurs.

Column No. 5 - Long term average (LTA) of all tests. The summation of the 12 samples divided by 12.

Column No. 6 - The long term average concentration mixed with the receiving water IWC7Q10. This is calculated by the following equation.

$$\{ \text{LTA concentration (Col. 5)} * \text{IWC}\% \} / 100$$

Column No. 7 - Chronic allowable - Chemical Specific State Water Quality Criteria (Attachment No. 7)

Column No. 8 - Pass or Fail. If column 6 > column 7, then water quality criteria is exceeded and failure occurs.

Column No. 9 - Human health determination. Long term average (Col. 5) is mixed with the mean annual flow (IWCMA) by the following equation.

$$\{ \text{LTA concentration (Col.5)} * \text{IWCMA \%} \} / 100$$

Column No. 10 – Human health allowable – State Water Quality Criteria (Attachment No.8).

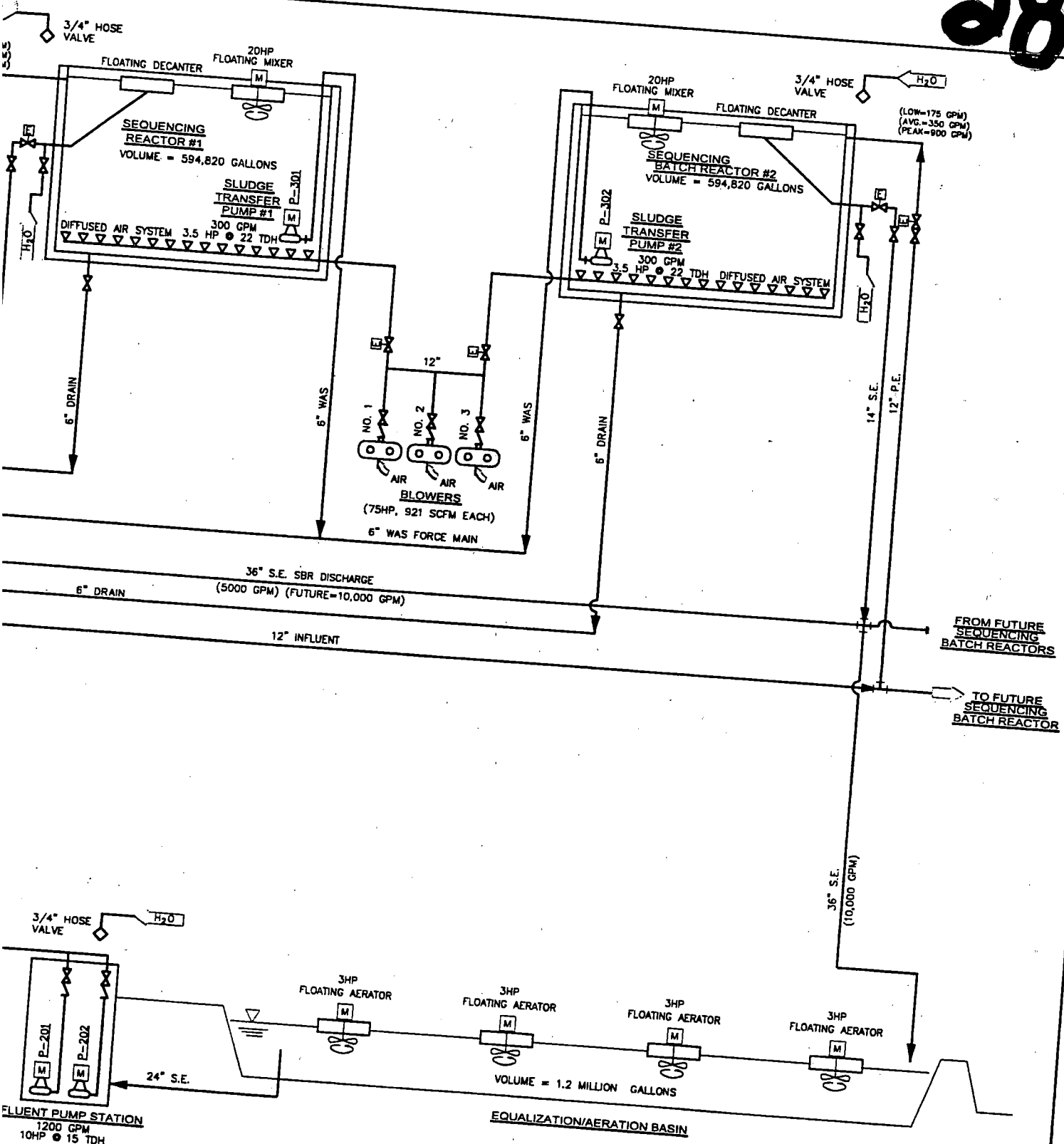
Note: Organisms only column is used if receiving waters are not drinking water supply.

Column No. 11 - Pass or Fail. If column 9 > column 10, then water quality criteria is exceeded and failure occurs.

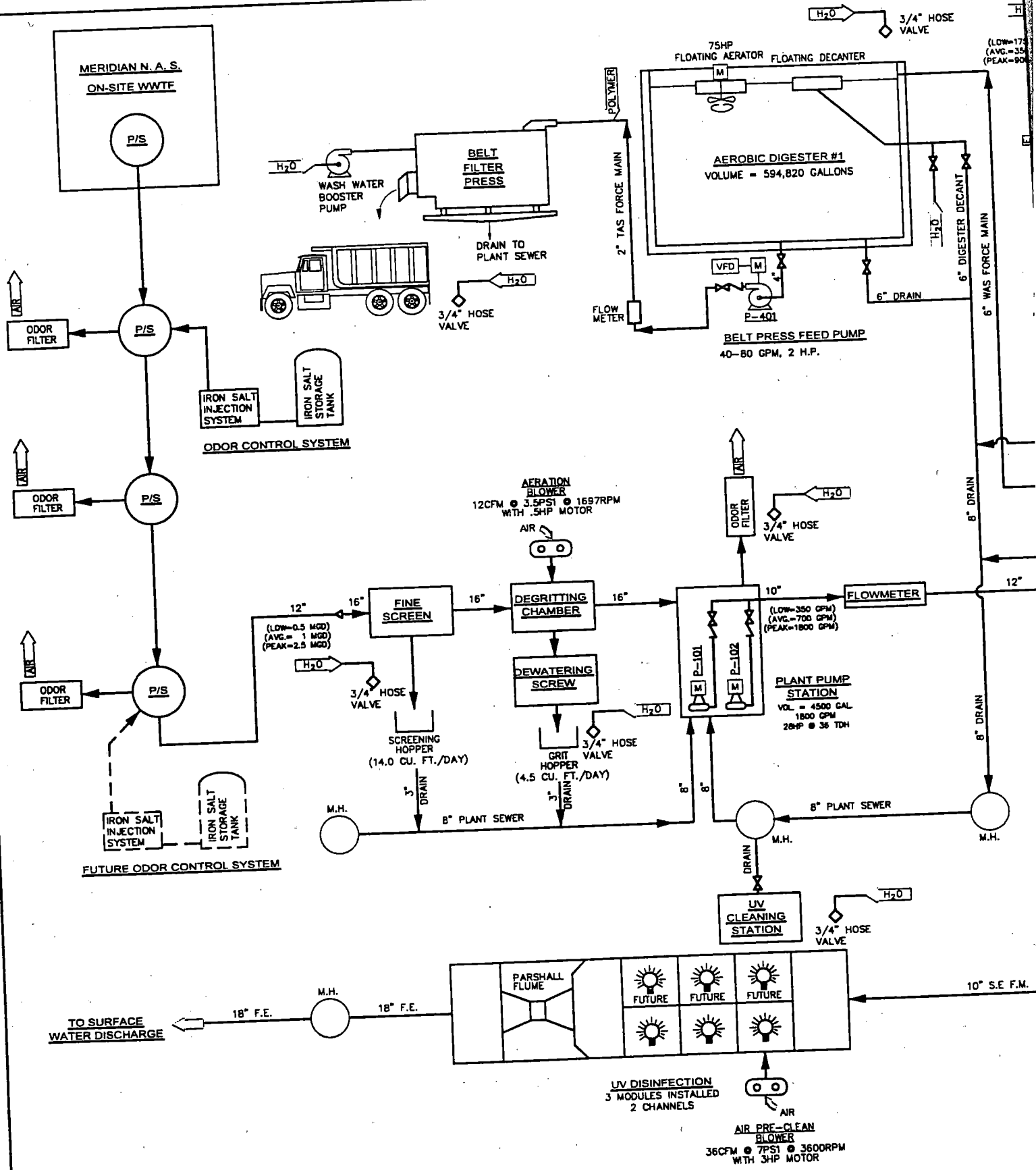
#### **Chemical specific analysis results**

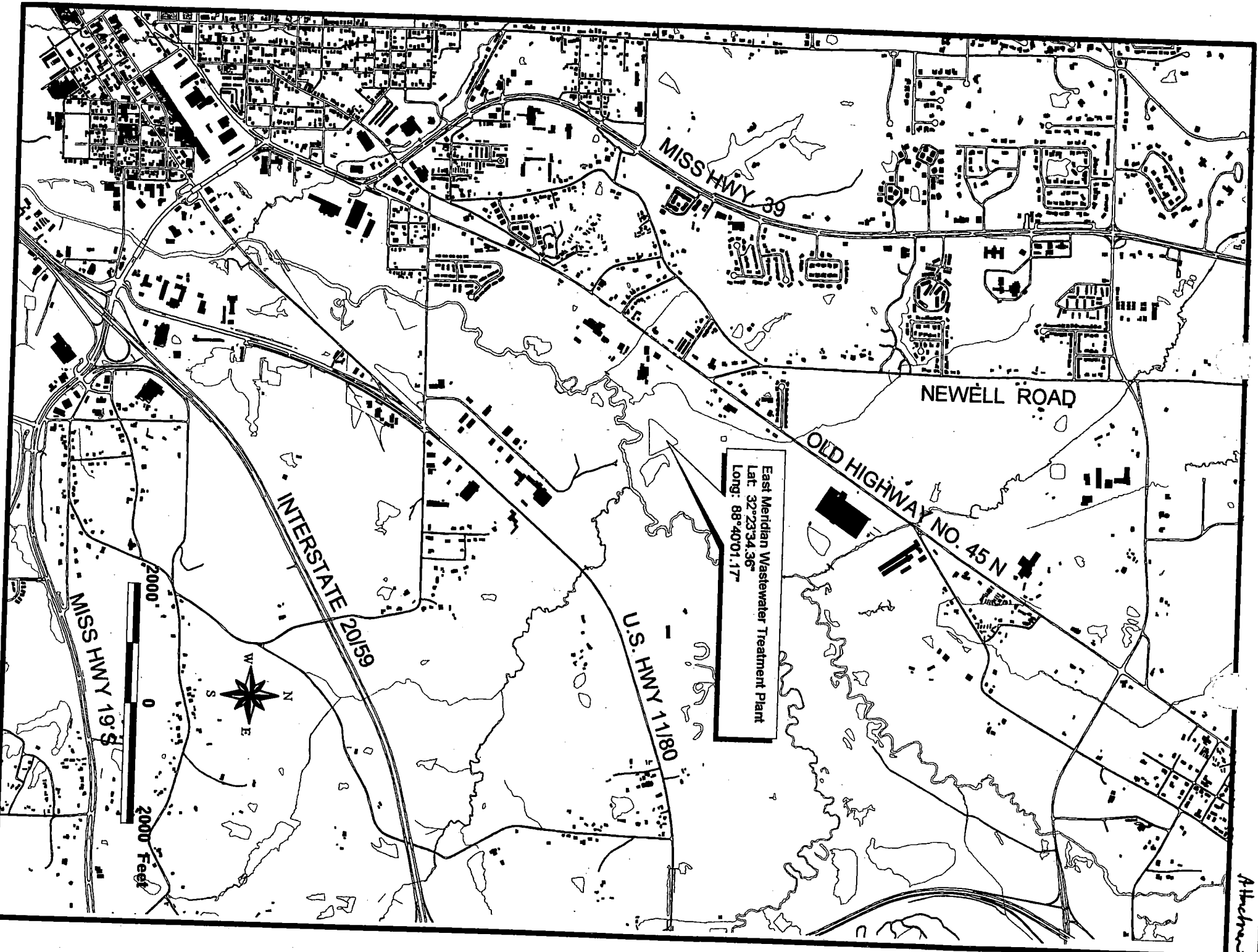
In accordance to State Regulation WPC-1 VI.B.1b., analyses for toxic pollutants listed in Table II of Appendix D of 40 CFR 122 should be conducted as part of the renewal application. The regulations require two influent and two effluent samples be collected each month during the six-month period prior to the application submittal deadline date. Five (5) of the toxic pollutants, Cadmium, Chromium (III), Copper, Lead, and Mercury appeared to show the potential to exceed water quality criteria. Therefore, each will have limits in this draft permit. Two (2) of the toxic pollutants, silver and zinc, each had one sample which caused a failure. However, since there was only one sample that caused the failure, it is presumed that there is not reasonable potential to exceed water quality criteria. Additionally, a re-opener clause has been added to Part III.A.3 in the proposed draft permit. The re-opener clause states that the permit may be modified pending the results of a future TMDL on the receiving stream.

# 28



<b>VERIFY SCALES</b> BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY	DESIGNER <b>J.L. BATES</b>	APPROVED	SEAL  THE CITY OF MERIDIAN, MISSISSIPPI EAST MERIDIAN WASTEWATER TREATMENT PLANT	SCALE <b>N.T.S.</b>
	DRAWN BY <b>J.L. BATES</b>	APPROVED		PROJECT NO. <b>3948002</b>
	ENGINEER <b>R.C. BORNEMAN</b>			
	PROJECT MGR. <b>R.C. BORNEMAN</b>			
	CHECKED BY <b>P.O'LOUGHLIN</b>	DATE		





Attchman



STATE OF MISSISSIPPI  
Haley Barbour, Governor  
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY  
CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

## MEMORANDUM

To: Chad Winter, Project Engineer, EPD  
From: Greg Jackson, Chief, TMDL / WLA Branch  
Date: May 20, 2004

### WASTELOAD ALLOCATION FOR NPDES PERMIT LIMITS

Facility: Meridian - NAS Facility

NPDES Permit Number: MS0055735

Outfall Number: 001

City: Meridian

County: Lauderdale

Basin: Pascagoula

Receiving Water: Sowashee Creek

7Q10: 0.50 cfs

Please include the following limits in the NPDES permit:

	Annual	Summer (May - Oct)	Winter (Nov - Apr)
Discharge (MGD)	1.0	-----	-----
BOD5 (mg/l)	10.0	-----	-----
NH3-N (mg/l)	2.0	-----	-----
Minimum DO (mg/l)	6.0	-----	-----
Fecal Coliform (col/100ml)	⇒	200	2,000
Cl <sub>2</sub> (mg/l)	0.015	-----	-----

#### Comments:

1. No change in existing discharge or location. 2. The receiving stream, Sowashee Creek, is on the 2002 Section 303(d) Monitored List, for Biological Impairment. 3. The above effluent limits may be revised (to more stringent), at a future date, based on the water quality of Sowashee Creek or a TMDL.

TMDL / WLA Branch Project Engineer: S. Markena, 05/19/04

CC:

Branch Chief:

*Greg Jackson* 5/19/04

# Davis Research, Inc.

P.O. Box 40, Avon, MS 38723-0040 Ph. (662) 332-1943 Fax (662) 332-0081

30

## Test Results for City of Meridian \*

Sample Description	Test Organism	ICp 25 Value (%)
Effluent Sample		
	<i>Pimephales promelas</i>	>100.0
	<i>Ceriodaphnia dubia</i>	5.38

\*A full report on each test in enclosed.

# *Davis Research, Inc.*

P.O. Box 40, Avon, MS 38723-0040 Ph. (662) 332-1943 Fax (662) 332-0081

## Test Results for City of Meridian \*

<u>Sample Description</u>	<u>Test Organism</u>	<u>ICp 25 Value (%)</u>
---------------------------	----------------------	-------------------------

Effluent Sample

	<i>Pimephales promelas</i>	>100.0
--	----------------------------	--------

	<i>Ceriodaphnia dubia</i>	12.71
--	---------------------------	-------

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\*A full report on each test in enclosed.

Chemical Specific Analysis Results For Meridian-NAS POTW												
Parameters	1/30/2004	2/13/2004	2/27/2004	3/3/2004	3/15/2004	3/29/2004	4/7/2004	4/19/2004	4/30/2004	5/10/2004	5/19/2004	5/28/2004
Antimony	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Arsenic	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Beryllium	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium	0.021	N.D.	N.D.	N.D.	N.D.	0.003	N.D.	0.007	0.002	N.D.	N.D.	N.D.
Chromium	0.078	N.D.	N.D.	N.D.	0.047	0.085	0.4	0.396	0.0645	0.044	0.049	N.D.
Chromium HEX	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.022
Copper	0.009	N.D.	N.D.	N.D.	0.007	0.005	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Lead	1.23	0.33	0.735	0.6	1.45	0.995	0.67	0.55	0.91	1.2	1.05	N.D.
Mercury	0.000382	0.000761	0.00073	0.0000485	0.0000114	0.0000602	0.000522	0.000607	0.000375	0.000306	0.000219	0.000116
Nickel	N.D.	N.D.	N.D.	N.D.	0.15	0.125	0.013	0.016	N.D.	N.D.	N.D.	0.003
Selenium	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Silver	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Thallium	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.001
Zinc	0.0325	0.021	0.0445	0.115	0.031	0.029	0.036	0.036	0.033	0.042	0.032	0.028
Cyanide	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Phenolic Compounds	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Pentachlorophenol	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Average

0  
0  
0  
0.00275  
0.098791667  
0  
0.00475  
0.821666667  
0.000344842  
0.025583333  
0  
8.33333E-05  
0  
0.04  
0  
0  
0

Alfred Cupo



March 19, 2004

#31  
RECEIVED  
MAR 22 2004  
Dept. of Environmental Quality  
Office of Pollution Control

Mr. Chad Winters  
MS Department Of Environmental Quality  
Office of Pollution Control  
P.O. Box 10385  
Jackson, MS 39289-0385

**Mayor:**  
JOHN ROBERT SMITH  
(601) 485-1927  
FAX: (601) 485-1911

Dear Mr. Winters:

**Council members :**  
GEORGE M THOMAS  
Ward 1

MARY A. B. PERRY  
Ward 2

BARBARA HENSON  
Ward 3

JESSE E. PALMER, SR.  
Ward 4

BOBBY R. SMITH  
Ward 5

COUNCIL CLERK:  
(601) 485-1959  
FAX: (601) 485-1913

The discharge permit for the East Meridian Wastewater Treatment Plant will expire on September 27, 2004, and the reapplication forms are due by March 27, 2004. Because the forms were mailed late, all of the testing and lab data will not be complete until May. At this time we are mailing Parts A & B of the reapplication forms. After all of the testing is complete, the entire packet including the Supplemental Application Information, the Toxicity Testing Data, and the Effluent Testing Information will be mailed to you. We are requesting a reissuance from the Director and Permit Board for new discharge permit.

Sincerely,

Yolanda C. Brown  
Chief Utility Plant Operator, WWTP

**CITY DEPARTMENTS:**

**Chief Administrative Officer**  
(601) 485-1929  
FAX: (601) 485-1911

**Community Development:**  
(601) 485-1910  
FAX: (601) 485-1911

**Finance and Records:**  
(601) 485-1946  
FAX: (601) 485-1911

**Fire:**  
(601) 485-1822  
FAX: (601) 485-1878

**Parks and Recreation:**  
(601) 485-1802  
FAX: (601) 485-1851

**Police:**  
(601) 485-1841  
FAX: (601) 485-1960

**Public Works:**  
(601) 485-1920  
FAX: (601) 485-1864

601 24th Avenue  
Post Office Box 1430  
Meridian, MS 39302-1430  
E-mail: cityhall@meridianms.org  
www.meridianms.org

FILE 32



STATE OF MISSISSIPPI  
GOVERNOR HALEY BARBOUR  
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY  
CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

March 23, 2004

Ms. Yolanda C. Brown  
Meridian POTW, Naval Air Station Facility  
PO Box 1430  
Meridian, Mississippi 39302

Dear Ms. Brown

Re: Meridian POTW, Naval Air Station Facility  
Lauderdale County  
Water Ref. No. MS0055735

This letter is to acknowledge receipt of your application on March 22, 2004. Within forty-five days after the date of receipt of the application, you will be notified either the submitted application is complete or of the major components required to complete the processing of your permit application.

If any of these actions involve construction activities, please notify us of your projected schedule for commencement of construction and completion of construction if this information is not already contained in the submitted application.

If you have any questions regarding the application or the permitting process, please contact Chad Winter at (601) 961-5171.

Sincerely,

A handwritten signature in cursive script that reads "Teresa Dennington".

Teresa Dennington  
Environmental Permits Division

cc:

13262 PER20040001

OFFICE OF POLLUTION CONTROL  
POST OFFICE BOX 10385 • JACKSON, MISSISSIPPI 39289-0385 • Tel: (601) 961-5171 • FAX: (601) 354-6612 • www.deq.state.ms.us  
AN EQUAL OPPORTUNITY EMPLOYER

## FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

#13262  
Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

## PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information. East Meridian Wastewater Treatment Plant  
Meridian POTW, Naval Air Station Facility

Facility name

Mailing Address

P.O. Box 1430

Meridian, MS 39302

Contact person

Yolanda C. Brown

Title

Chief Utility Plant Operator

Telephone number

(601) 485-1815

Facility Address

3900 Old Highway 45 North

(not P.O. Box)

Meridian, MS 39301

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name

Mailing Address

Contact person

Title

Telephone number

Is the applicant the owner or operator (or both) of the treatment works?

☐ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☒ facility ☐ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES

MS0055735

UIC

RCRA

PSD

Other

Sludge Permit #SW0350030431

Other

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name

Population Served

Type of Collection System

Ownership

Naval Air Station  
Facility, POTW

4000

separate

municipal

Total population served 4000

FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## A.5. Indian Country.

a. Is the treatment works located in Indian Country?  
☐ Yes ☒ Nob. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?  
☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 1.0 mgd

Two Years Ago

Last Year

b. Annual average daily flow rate

n/a

n/a

c. Maximum daily flow rate

n/a

n/a

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer100 %☐ Combined storm and sanitary sewer

%

## A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.?  
☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent

X

ii. Discharges of untreated or partially treated effluent

iii. Combined sewer overflow points

iv. Constructed emergency overflows (prior to the headworks)

v. Other \_\_\_\_\_

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?  
☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: \_\_\_\_\_ mgd

Annual average daily volume discharged to surface impoundment(s) \_\_\_\_\_ mgd

Is discharge \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

c. Does the treatment works land-apply treated wastewater?  
☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: \_\_\_\_\_

Number of acres: \_\_\_\_\_

Annual average daily volume applied to site: \_\_\_\_\_ Mgd

Is land application \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?  
☐ Yes ☒ No

**FACILITY NAME AND PERMIT NUMBER:**

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).  
n/a

If transport is by a party other than the applicant, provide:

Transporter name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

For each treatment works that receives this discharge, provide the following:

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

If known, provide the NPDES permit number of the treatment works that receives this discharge. \_\_\_\_\_

Provide the average daily flow rate from the treatment works into the receiving facility. \_\_\_\_\_

mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

\_\_\_\_\_ Yes \_\_\_\_\_ ☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable): \_\_\_\_\_

Annual daily volume disposed of by this method: \_\_\_\_\_

Is disposal through this method \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number

001

b. Location

Meridian

39301

(Zip Code)

(City or town, if applicable)

Lauderdale

MS

(State)

(County)

32 degree 23'34.36"

88 degree 40'01.17"

(Longitude)

(Latitude)

c. Distance from shore (if applicable)

appr. 4

ft. w/average flow & creek levels

d. Depth below surface (if applicable)

4

ft. w/18" discharge pipe

e. Average daily flow rate

f. Does this outfall have either an intermittent or a periodic discharge?

X

Yes

No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs:

2 or 3 time per week = 156 times per year

Average duration of each discharge:

6 hrs per discharge

Average flow per discharge:

Months in which discharge occurs:

Jan - Dec

g. Is outfall equipped with a diffuser?

Yes

X

No

A.10. Description of Receiving Waters.

a. Name of receiving water

Sowashee Creek

b. Name of watershed (if known)

not known

United States Soil Conservation Service 14-digit watershed code (if known):

not known

c. Name of State Management/River Basin (if known):

Tombigbee River Basin

United States Geological Survey 8-digit hydrologic cataloging unit code (if known):

not known

d. Critical low flow of receiving stream (if applicable): not known

acute \_\_\_\_\_ cfs

chronic \_\_\_\_\_ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): \_\_\_\_\_ mg/l of CaCO<sub>3</sub>

not known

## FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

☐ Primary☐ Secondary☐ Advanced☒

Other. Describe:

Sequencing Batch Reactor (SBR)

b. Indicate the following removal rates (as applicable):

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal

85

%

Design SS removal

85

%

Design P removal

%

Design N removal

%

Other

%

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

UV disinfection

If disinfection is by chlorination, is dechlorination used for this outfall?

☐ Yes☐ No

d. Does the treatment plant have post aeration?

☒ Yes☐ No

**A.12. Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		
	Value	Units	Value
pH (Minimum)		S.U.	
pH (Maximum)		S.U.	
Flow Rate			
Temperature (Winter)			
Temperature (Summer)			

\* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
BIOCHEMICAL OXYGEN	BOD-5						
DEMAND (Report one)	CBOD-5		mg/L		mg/L		5210B
FECAL COLIFORM							9222D
TOTAL SUSPENDED SOLIDS (TSS)							2540B

Lab Data  
Incomplete

END OF PART A.  
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

### PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate  $\geq 0.1$  mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

**B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

\_\_\_\_\_ gpd up to 50% of flow during a heavy rain event

Briefly explain any steps underway or planned to minimize inflow and infiltration.

There should be very little I & I from NAS to the treatment plant because of the new pipe lines. The infiltration must be located on the NAS facility.

**B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

n/a c. Each well where wastewater from the treatment plant is injected underground.

n/a d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

n/a f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

**B.3. Process Flow Diagram or Schematic.** Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

**B.4. Operation/Maintenance Performed by Contractor(s).**

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? \_\_\_\_ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Responsibilities of Contractor: \_\_\_\_\_

**B.5. Scheduled Improvements and Schedules of Implementation.** Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

n/a

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

\_\_\_\_ Yes ☒ No

## FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

- c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).  
n/a

- n/a d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule	Actual Completion
	MM/DD/YYYY	MM/DD/YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

- n/a e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? \_\_\_ Yes \_\_\_ No  
Describe briefly: \_\_\_\_\_

## EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)		mg/L		mg/L		standard methods	
CHLORINE (TOTAL RESIDUAL, TRC) n/a						4500NH <sub>3</sub>	
DISSOLVED OXYGEN		mg/L		mg/L		4500ClG	
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE NITROGEN							
OIL and GREASE							
PHOSPHORUS (Total)							
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER							

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

## FACILITY NAME AND PERMIT NUMBER:

East Meridian WWT - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

## PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☒ Part D (Expanded Effluent Testing Data)☒ Part E (Toxicity Testing: Biomonitoring Data)☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)

## ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Yolanda C. Brown, Chief U.P.O.Signature Yolanda C. BrownTelephone number (601) 485-1815Date signed March 19, 2004

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:



# 13262

May 27, 2004

**RECEIVED**  
JUN - 1 2004  
Dept. of Environmental Quality  
Office of Pollution Control**Mayor:**

JOHN ROBERT SMITH  
(601) 485-1927  
FAX: (601) 485-1911

**Council members :**

GEORGE M THOMAS  
Ward 1

MARY A. B. PERRY  
Ward 2

BARBARA HENSON  
Ward 3

JESSE E. PALMER, SR.  
Ward 4

BOBBY R. SMITH  
Ward 5

COUNCIL CLERK:  
(601) 485-1959  
FAX: (601) 485-1913

**CITY DEPARTMENTS:****Chief Administrative Officer**

(601) 485-1929  
FAX: (601) 485-1911

**Community Development:**

(601) 485-1910  
FAX: (601) 485-1911

**Finance and Records:**

(601) 485-1946  
FAX: (601) 485-1911

**Fire:**

(601) 485-1822  
FAX: (601) 485-1878

**Parks and Recreation:**

(601) 485-1802  
FAX: (601) 485-1851

**Police:**

(601) 485-1841  
FAX: (601) 485-1960

**Public Works:**

(601) 485-1920  
FAX: (601) 485-1864

Mr. Chad Winters  
MS Department of Environmental Quality  
Office of Pollution Control  
P.O. Box 10385  
Jackson, MS 39289-0385

Dear Mr. Winters

Re: Meridian POTW, Naval Air Station Facility  
Lauderdale County  
Water Ref. # MS0055735

The discharge permit for the East Meridian Wastewater Treatment Plant will expire on September 27, 2004. Per our phone conversations, the new deadline for the reapplication forms are due on June 1, 2004 which contains only the lab data I had thus far. We have the results for 8 out of 12 test samples and have one more sampling date scheduled for the end of the month. When all of the lab results return, I will sent a copy of the remaining test results, and will calculate and compute the new averages and maximum values for the metals, on page 10 of the Expanded Effluent Testing Data, Part D. It takes approximately three weeks to obtain results from the contract lab. I thank you for your assistance and cooperation.

Sincerely,

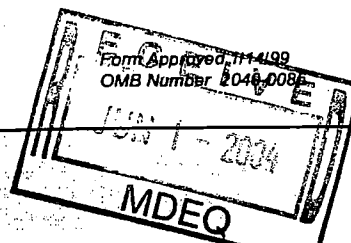
Yolanda C. Brown

FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

FORM  
2A  
NPDES

## NPDES FORM 2A APPLICATION OVERVIEW



### APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

#### BASIC APPLICATION INFORMATION:

- A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. **Additional Application Information for Applicants with a Design Flow  $\geq 0.1$  mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. **Certification.** All applicants must complete Part C (Certification).

#### SUPPLEMENTAL APPLICATION INFORMATION:

- D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
  - 1. Has a design flow rate greater than or equal to 1 mgd,
  - 2. Is required to have a pretreatment program (or has one in place), or
  - 3. Is otherwise required by the permitting authority to provide the information.
- E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
  - 1. Has a design flow rate greater than or equal to 1 mgd,
  - 2. Is required to have a pretreatment program (or has one in place), or
  - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
  - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
  - 2. Any other industrial user that:
    - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
    - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
    - c. Is designated as an SIU by the control authority.
- G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

**ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)**

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

Form Approved 11/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

## PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

## A.1. Facility Information. East Meridian Wastewater Treatment Plant

Facility name Meridian POTW, Naval Air Station Facility

Mailing Address P.O. Box 1430  
Meridian, MS 39302

Contact person Yolanda C. Brown

Title Chief Utility Plant Operator

Telephone number (601) 485-1815

Facility Address 3900 Old Highway 45 North  
(not P.O. Box) Meridian, MS 39301

## A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name same

Mailing Address

Contact person

Title

Telephone number

Is the applicant the owner or operator (or both) of the treatment works?

owner ☐ operator ☒

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

X facility applicant

## A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES MS0055735

UIC

RCRA

PSD

Other Sludge Permit #SW0350030431

Other

## A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
Naval Air Station	4000	separate	municipal
Facility, POTW			
Total population served	4000		

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## A.5. Indian Country.

a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 1.0 mgd

Two Years Ago

Last Year

This Year

0.67

mgd

b. Annual average daily flow rate

n/an/a1.03

mgd

c. Maximum daily flow rate

n/an/a

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

100

%

☒ Separate sanitary sewer☐ Combined storm and sanitary sewer

## A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.?

☒ Yes☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent

X

ii. Discharges of untreated or partially treated effluent

iii. Combined sewer overflow points

iv. Constructed emergency overflows (prior to the headworks)

v. Other \_\_\_\_\_

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes☒ No

If yes, provide the following for each surface impoundment:

Location: \_\_\_\_\_

Annual average daily volume discharged to surface impoundment(s) \_\_\_\_\_ mgd

Is discharge \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

c. Does the treatment works land-apply treated wastewater?

☐ Yes☒ No

If yes, provide the following for each land application site:

Location: \_\_\_\_\_

Number of acres: \_\_\_\_\_

Annual average daily volume applied to site: \_\_\_\_\_ Mgd

Is land application \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes☒ No

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).  
n/a

If transport is by a party other than the applicant, provide:

Transporter name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

For each treatment works that receives this discharge, provide the following:

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

If known, provide the NPDES permit number of the treatment works that receives this discharge. \_\_\_\_\_

Provide the average daily flow rate from the treatment works into the receiving facility. \_\_\_\_\_ mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

\_\_\_\_ Yes

☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):  
\_\_\_\_\_  
\_\_\_\_\_

Annual daily volume disposed of by this method: \_\_\_\_\_

Is disposal through this method \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

## FACILITY NAME AND PERMIT NUMBER:

East Meridian WWT - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

## A.9. Description of Outfall.

a. Outfall number

001

b. Location

Meridian

39307

(City or town, if applicable)

(Zip Code)

Lauderdale

MS

(County)

(State)

(Latitude)

32 degree 23'34.36"

(Longitude)

88 degree 40'01.17"

c. Distance from shore (if applicable)

appr. 4

ft. w/average flow &amp; creek levels

d. Depth below surface (if applicable)

4

ft. w/18" discharge pipe

e. Average daily flow rate

0.67

mgd

f. Does this outfall have either an intermittent or a periodic discharge?

X

Yes

No

(go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs:

2 or 3 time per week = 156 times per year

Average duration of each discharge:

6 hrs per discharge

Average flow per discharge:

0.67

mgd

Months in which discharge occurs:

Jan - Dec

g. Is outfall equipped with a diffuser?

Yes

X

No

## A.10. Description of Receiving Waters.

a. Name of receiving water

Sowashee Creek

b. Name of watershed (if known)

not known

United States Soil Conservation Service 14-digit watershed code (if known):

not known

c. Name of State Management/River Basin (if known):

Tombigbee River Basin

United States Geological Survey 8-digit hydrologic cataloging unit code (if known):

not known

d. Critical low flow of receiving stream (if applicable): not known

acute \_\_\_\_\_ cfs

chronic \_\_\_\_\_ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): \_\_\_\_\_ mg/l of CaCO<sub>3</sub> not known

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☐ Primary☐ Secondary☐ Advanced☒

Other. Describe:

Sequencing Batch Reactor (SBR)

- b. Indicate the following removal rates (as applicable):

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal

85 %

Design SS removal

85 %

Design P removal

%

Design N removal

%

Other

%

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

UV disinfection

If disinfection is by chlorination, is dechlorination used for this outfall?

☐ Yes☐ No

- d. Does the treatment plant have post aeration?

☒

Yes

☐ No

**A.12. Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.0	s.u.	7.6	s.u.	48
pH (Maximum)	9.7	s.u.	—	—	—
Flow Rate	1.03	MGD	0.67	MGD	47
Temperature (Winter) Jan - Mar	12.8	Celsius	16.3	Celsius	48
Temperature (Summer) Mar - May	21.7	Celsius	—	—	—

\* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL Detection limits?
	Conc.	Units	Conc.	Units	Number of Samples		

## CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	9.6	mg/L	4.0	mg/L	15	5210 B	0.1
	CBOD-5	—	—	—	—	—	—	—
FECAL COLIFORM		9	colonies	2	col.	17	9222D	1 e.c.
TOTAL SUSPENDED SOLIDS (TSS)		18	mg/L	8	mg/L	17	2540B	1

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

### PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate  $\geq 0.1$  mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

**B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

\_\_\_\_\_ gpd up to 50% of flow during a heavy rain event

Briefly explain any steps underway or planned to minimize inflow and infiltration.

There should be very little I & I from NAS to the treatment plant because of the new pipe lines. The infiltration must be located on the NAS facility.

**B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.) All maps were sent in March on the original deadline date.

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

**B.3. Process Flow Diagram or Schematic.** Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g. chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

#### B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Responsibilities of Contractor: \_\_\_\_\_

**B.5. Scheduled Improvements and Schedules of Implementation.** Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

\_\_\_\_\_ n/a

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

☐ Yes ☒ No

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

- c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).  
n/a

- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

n/a	Schedule	Actual Completion
Implementation Stage	MM/DD/YYYY	MM/DD/YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? \_\_\_ Yes \_\_\_ No n/a  
Describe briefly: \_\_\_\_\_

## B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	report limits ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
standard methods★							
AMMONIA (as N)	1.1	mg/L	0.6	mg/L	17	4500NH3B★	0.1
CHLORINE (TOTAL RESIDUAL, TRC)	0.06	mg/L	0.03	mg/L	9	4500CIG★	0.01
DISSOLVED OXYGEN	12.8	mg/L	8.6	mg/L	47	4500-OG★	0.1
TOTAL KJELDAHL NITROGEN (TKN)	2.24	ppm	1.77	ppm	3	4500-NB★	0.01
NITRATE PLUS NITRITE NITROGEN	0.084	ppm	0.610	ppm	3	353.2	0.001
OIL and GREASE	4.6	ppm	2.7	ppm	3	1664	1.0
PHOSPHORUS (Total)	0.410	ppm	0.787	ppm	3	365.4	0.001
TOTAL DISSOLVED SOLIDS (TDS)	82.0	ppm	69.0	ppm	3	160.1	0.01
OTHER Hardness	137064.19	as CaCO3	87,806.99	as CaCO3	3	130.2	-

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

**FACILITY NAME AND PERMIT NUMBER:**

East Meridian WWTP - MS0055735

Form Approved 11/14/99  
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART C: CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

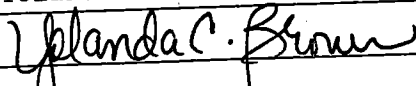
☒ Part D (Expanded Effluent Testing Data)☒ Part E (Toxicity Testing: Biomonitoring Data)☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title

Yolanda C. Brown, Chief U.P.O.

Signature



Telephone number

(601) 485-1815

Date signed

May 25, 2004

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

**SEND COMPLETED FORMS TO:**

## FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## SUPPLEMENTAL APPLICATION INFORMATION

## PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

**Effluent Testing: 1.0 mgd and Pretreatment Treatment Works.** If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY	ND	ppb			ND	ppb			8	200.7	10.0
ARSENIC	ND	ppb			ND	ppb			8	206.2	10.0
BERYLLIUM	ND	ppb			ND	ppb			8	200.7	5.0
CADMIUM	21	ppb			10.3	ppb			8	213.1	1.0
CHROMIUM	400	ppb			201.2	ppb			8	218.1	5.0
COPPER	9	ppb			7	ppb			8	220.1	10.0
LEAD	1450	ppb			820	ppb			8	239.1	5.0
MERCURY	.761	ppb			.390	ppb			8	1631E	0.0002
NICKEL	150	ppb			76	ppb			8	249.2	5.0
SELENIUM	ND	ppb			ND	ppb			8	270.2	2.0
SILVER	ND	ppb			ND	ppb			8	272.1	2.0
THALLIUM	ND	ppb			ND	ppb			8	279.2	10.0
ZINC	115	ppb			43.13	ppb			8	289.1	50
CYANIDE	ND	ppb			ND	ppb			8	335.2	10.0
TOTAL PHENOLIC COMPOUNDS	ND	ppb			ND	ppb			8	625	10.0
HARDNESS (AS CaCO <sub>3</sub> )	137,064.19	ppb			87,806.99	ppb			3	130.2	-
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

Outfall number: 001		(Complete once for each outfall discharging effluent to waters of the United States.)									
POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	ND	ppb			ND	ppb			3	624	5.0
ACRYLONITRILE											5.0
BENZENE											1.0
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYL VINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE	ND	ppb			ND	ppb			3	624	1.0
1,1,2-TRICHLOROETHANE	↓	↓			↓	↓			↓	↓	↓
TRICHLOROETHYLENE	↓	↓			↓	↓			↓	↓	↓
VINYL CHLORIDE	↓	↓			↓	↓			↓	↓	↓

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

## ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL	ND	ppb			ND	ppb			3	625	10.0
2-CHLOROPHENOL	↓	↓			↓	↓			↓	↓	↓
2,4-DICHLOROPHENOL	↓	↓			↓	↓			↓	↓	↓
2,4-DIMETHYLPHENOL	↓	↓			↓	↓			↓	↓	↓
4,6-DINITRO-O-CRESOL	↓	↓			↓	↓			↓	↓	↓
2,4-DINITROPHENOL	↓	↓			↓	↓			↓	↓	↓
2-NITROPHENOL	↓	↓			↓	↓			↓	↓	↓
4-NITROPHENOL	↓	↓			↓	↓			↓	↓	↓
PENTACHLOROPHENOL	↓	↓			↓	↓			↓	↓	↓
PHENOL	↓	↓			↓	↓			↓	↓	↓
2,4,6-TRICHLOROPHENOL	↓	↓			↓	↓			↓	↓	↓

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

## BASE-NEUTRAL COMPOUNDS.

ACENAPHTHENE	ND	ppb			ND	ppb			3	625	10.0
ACENAPHTHYLENE	↓	↓			↓	↓			↓	↓	↓
ANTHRACENE	↓	↓			↓	↓			↓	↓	↓
BENZIDINE	↓	↓			↓	↓			↓	↓	↓
BENZO(A)ANTHRACENE	↓	↓			↓	↓			↓	↓	↓

BENZO(A)PYRENE	ND	ppb			ND	ppb			5	625	10.0
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FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE	ND	ppb			ND	ppb			3	625	10.0
BENZO(GH)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											

1,2-DIPHENYLHYDRAZINE	ND	ppb			ND	ppb				625	10.0
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**FACILITY NAME AND PERMIT NUMBER:**

East Meridian WWTP - MS0055735

 Form Approved 1/14/99  
OMB Number 2040-0086

 Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	ND	ppb			ND	ppb			3	625	10.0
FLUORENE											
HEXACHLORO BENZENE											
HEXACHLORO BUTADIENE											
HEXACHLORO CYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLORO BENZENE											
Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.											
Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.											
<p align="center"><b>END OF PART D.</b></p> <p align="center"><b>REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE</b></p>											

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP- MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## SUPPLEMENTAL APPLICATION INFORMATION

## PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

## E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

☒ chronic ☐ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 1a Test number: 1b Test number: -

## a. Test information.

Test species & test method number	ceriodaphnia Dubia	pimephales promelas	Method 11000.0
Age at initiation of test	< 24 hours old	< 24 hours old	-
Outfall number	001	001	-
Dates sample collected	Feb 9th, 11th & 13th	2004	-
Date test started	Feb 10, 12, & 14	2004	-
Duration	7 days	7 days	-

## b. Give toxicity test methods followed.

Manual title	EPA/600/4-91/002, Short-term methods for estimating the Chronic Toxicity of effluents and receiving waters to Freshwater organisms, 3rd edition, July 1994
Edition number and year of publication	
Page number(s)	n/a

## c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite	6 hour composite	6 hr	-
Grab			

## d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection	x	x	-
After dechlorination			

## FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086Test number: 1aTest number: 1bTest number: -

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

in effluent discharge channel, after UV disinfection &amp; before discharge to creek

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

x

x

-

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

x

x

-

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

x

x

-

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Synthetic, moderately hard diluted mineral water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

0, 6.25, 12.50, 25, 50, 100

-

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

8.7 - 9.4

8.7 - 9.4

-

Salinity

-

-

-

Temperature

25 degrees C + 1 degrees

25 degree C

-

Ammonia

-

-

-

Dissolved oxygen

8.2 - 10.1

8.2 - 9.3

-

l. Test Results.

Acute: n/a

Percent survival in 100% effluent

%

%

%

LC<sub>50</sub>

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

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OMB Number 2040-0086

## Chronic:

NOEC	%	%	%
IC <sub>25</sub>	12.71	%	> 100%
Control percent survival	%	%	%
Other (describe)			

## m. Quality Control/Quality Assurance.

Is reference toxicant data available?	Hach Water Analysis Handbook		-
Was reference toxicant test within acceptable bounds?	yes	yes	-
What date was reference toxicant test run (MM/DD/YYYY)?	date of test	date of test	-
Other (describe)			

## E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes ☐ No ☒

If yes, describe:

## E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

N/A

Date submitted: (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## SUPPLEMENTAL APPLICATION INFORMATION

## PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

## E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

☒ chronic ☐ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 2a

Test number: 2b

Test number: --

## a. Test information.

Test species & test method number	Ceriodaphnia Dubia	Pimephales promelas	Method #1000.0
Age at initiation of test	< 24 hours old	< 24 hrs	-
Outfall number	001	001	-
Dates sample collected	April 5, 7, & 9 2004		-
Date test started	April 6, 8, & 10 2004		-
Duration	7 days	7 days	-

## b. Give toxicity test methods followed.

Manual title	EPA/600/4-91/002, Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms, 3rd edition July 1994		
Edition number and year of publication			
Page number(s)	n/a		

## c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite	6 hour composite	6 hr	-
Grab			-

## d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection	x	x	-
After dechlorination			

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086Test number: 2aTest number: 2bTest number: -

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

In effluent discharge channel

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

X

X

-

Acute toxicity

g. Provide the type of test performed.

Static

X

X

-

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

X

X

-

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Synthetic, moderately hard diluted mineral water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

0, 6.25, 12.50, 25, 50, 100

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

7.5-9.4

7.5 - 9.4

-

Salinity

-

-

-

Temperature

25 degree C

25 degree C

-

Ammonia

-

-

-

Dissolved oxygen

7.9 - 9.1

7.9 - 9.1

-

l. Test Results.

Acute: n/a

Percent survival in 100%  
effluent

%

%

%

LC<sub>50</sub>

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

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Chronic:

NOEC	%	%	%
IC <sub>25</sub>	5.38	7 100	-
Control percent survival	%	%	%
Other (describe)			

## m. Quality Control/Quality Assurance.

Is reference toxicant data available?	Hach Water Analysis	Handbook	-
Was reference toxicant test within acceptable bounds?	yes	yes	-
What date was reference toxicant test run (MM/DD/YYYY)?	Date of test	date of test	-
Other (describe)			

## E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

☐ Yes ☒ No

If yes, describe:

## E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

N/A

Date submitted: (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.  
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

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## SUPPLEMENTAL APPLICATION INFORMATION

### PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES N/A

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

#### GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

☐ Yes ☐ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. \_\_\_\_\_

b. Number of CIUs. \_\_\_\_\_

#### SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): \_\_\_\_\_

Raw material(s): \_\_\_\_\_

#### F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

\_\_\_\_\_ gpd ( ☐ continuous or ☐ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

\_\_\_\_\_ gpd ( ☐ continuous or ☐ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ☐ Yes ☐ No

b. Categorical pretreatment standards ☐ Yes ☐ No

If subject to categorical pretreatment standards, which category and subcategory?  
\_\_\_\_\_

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**F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

☐ Yes ☐ No

If yes, describe each episode.

**RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:**

**F.9. RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?  
☐ Yes ☐ No (go to F.12.)

**F.10. Waste Transport.** Method by which RCRA waste is received (check all that apply):

☐ Truck☐ Rail☐ Dedicated Pipe

**F.11. Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste NumberAmountUnits**CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:**

**F.12. Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.)☐ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

**F.13. Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA or other remedial waste originates (or is expected to originate in the next five years).

**F.14. Pollutants.** List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

**F.15. Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous☐ Intermittent

If intermittent, describe discharge schedule.

**END OF PART F.**

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

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## SUPPLEMENTAL APPLICATION INFORMATION

### PART G. COMBINED SEWER SYSTEMS N/A

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

### CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

#### G.3. Description of Outfall.

- Outfall number \_\_\_\_\_
- Location  
(City or town, if applicable) \_\_\_\_\_ (Zip Code) \_\_\_\_\_  
(County) \_\_\_\_\_ (State) \_\_\_\_\_  
(Latitude) \_\_\_\_\_ (Longitude) \_\_\_\_\_
- Distance from shore (if applicable) \_\_\_\_\_ ft.
- Depth below surface (if applicable) \_\_\_\_\_ ft.
- Which of the following were monitored during the last year for this CSO?  
\_\_\_\_ Rainfall      \_\_\_\_ CSO pollutant concentrations      \_\_\_\_ CSO frequency  
\_\_\_\_ CSO flow volume      \_\_\_\_ Receiving water quality
- How many storm events were monitored during the last year? \_\_\_\_\_

#### G.4. CSO Events.

- Give the number of CSO events in the last year.  
\_\_\_\_\_ events (\_\_\_\_ actual or \_\_\_\_ approx.)
- Give the average duration per CSO event.  
\_\_\_\_\_ hours (\_\_\_\_ actual or \_\_\_\_ approx.)

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- c. Give the average volume per CSO event.

\_\_\_\_\_ million gallons (\_\_\_\_\_ actual or \_\_\_\_\_ approx.)

- d. Give the minimum rainfall that caused a CSO event in the last year.

\_\_\_\_\_ inches of rainfall

**G.5. Description of Receiving Waters.**

- a. Name of receiving water: \_\_\_\_\_

- b. Name of watershed/river/stream system: \_\_\_\_\_

United States Soil Conservation Service 14-digit watershed code (if known): \_\_\_\_\_

- c. Name of State Management/River Basin: \_\_\_\_\_

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): \_\_\_\_\_

**G.6. CSO Operations.**

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

**END OF PART G.****REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.**

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0005735

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FORM

2A

NPDES

## NPDES FORM 2A APPLICATION OVERVIEW

JUL 7 2004  
U.S. DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF ENVIRONMENTAL QUALITY

## APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

## BASIC APPLICATION INFORMATION:

- A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. **Additional Application Information for Applicants with a Design Flow  $\geq$  0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. **Certification.** All applicants must complete Part C (Certification).

## SUPPLEMENTAL APPLICATION INFORMATION:

- D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
1. Has a design flow rate greater than or equal to 1 mgd,
  2. Is required to have a pretreatment program (or has one in place), or
  3. Is otherwise required by the permitting authority to provide the information.
- E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
1. Has a design flow rate greater than or equal to 1 mgd,
  2. Is required to have a pretreatment program (or has one in place), or
  3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
  2. Any other industrial user that:
    - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
    - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
    - c. Is designated as an SIU by the control authority.
- G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

**ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)**

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## BASIC APPLICATION INFORMATION

## PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information. East Meridian Wastewater Treatment Plant  
Meridian POTW, Naval Air Station Facility

Facility name

Mailing Address

P.O. Box 1430

Meridian, MS 39302

Contact person

Yolanda C. Brown

Title

Chief Utility Plant Operator

Telephone number

(601) 485-1815

Facility Address

3900 Old Highway 45 North

(not P.O. Box)

Meridian, MS 39301

## A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name

Mailing Address

Contact person

Title

Telephone number

Is the applicant the owner or operator (or both) of the treatment works?

☐ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☒ facility ☐ applicant

## A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES MS0055735

PSD

UIC

Other Sludge Permit #SW0350030431

RCRA

Other

## A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name

Population Served

Type of Collection System

Ownership

Naval Air Station  
Facility, POTW

4000

separate

municipal

Total population served 4000

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## A.5. Indian Country.

a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 1.0 mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	<u>n/a</u>	<u>n/a</u>	<u>0.67</u>	mgd
c. Maximum daily flow rate	<u>n/a</u>	<u>n/a</u>	<u>1.03</u>	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer☐ Combined storm and sanitary sewer100 %  
%

## A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.?

☒ Yes ☐ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent

☒

ii. Discharges of untreated or partially treated effluent

iii. Combined sewer overflow points

iv. Constructed emergency overflows (prior to the headworks)

v. Other

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: \_\_\_\_\_

Annual average daily volume discharged to surface impoundment(s) \_\_\_\_\_ mgd

Is discharge \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: \_\_\_\_\_

Number of acres: \_\_\_\_\_

Annual average daily volume applied to site: \_\_\_\_\_ Mgd

Is land application \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes ☒ No

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If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

n/a

If transport is by a party other than the applicant, provide:

Transporter name:

Mailing Address:

Contact person:

Title:

Telephone number:

For each treatment works that receives this discharge, provide the following:

Name:

Mailing Address:

Contact person:

Title:

Telephone number:

If known, provide the NPDES permit number of the treatment works that receives this discharge.

Provide the average daily flow rate from the treatment works into the receiving facility.

mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

Yes

X

No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method:

Is disposal through this method continuous or intermittent?

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## WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

## A.9. Description of Outfall.

- a. Outfall number 001
- b. Location Meridian 39307  
(City or town, if applicable) (Zip Code)  
Lauderdale MS  
(County) (State)  
32 degree 23'34.36" 88 degree 40'01.17"  
(Latitude) (Longitude)
- c. Distance from shore (if applicable) appr. 4 ft. w/average flow & creek levels
- d. Depth below surface (if applicable) 4 ft. w/18" discharge pipe
- e. Average daily flow rate 0.67 mgd
- f. Does this outfall have either an intermittent or a periodic discharge?  
X Yes        No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: 2 or 3 time per week = 156 times per year
- Average duration of each discharge: 6 hrs per discharge
- Average flow per discharge: 0.67 mgd
- Months in which discharge occurs: Jan - Dec
- g. Is outfall equipped with a diffuser?        Yes X No

## A.10. Description of Receiving Waters.

- a. Name of receiving water Sowashee Creek
- b. Name of watershed (if known) not known
- United States Soil Conservation Service 14-digit watershed code (if known): not known
- c. Name of State Management/River Basin (if known): Tombigbee River Basin
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): not known
- d. Critical low flow of receiving stream (if applicable): not known  
acute        cfs chronic        cfs
- e. Total hardness of receiving stream at critical low flow (if applicable):        mg/l of CaCO<sub>3</sub> not known

## FACILITY NAME AND PERMIT NUMBER:

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## A.11. Description of Treatment

a. What levels of treatment are provided? Check all that apply.

☐ Primary
 ☐ Secondary  
☐ Advanced
 ☒ Other. Describe:

Sequencing Batch Reactor (SBR)

b. Indicate the following removal rates (as applicable):

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal 85 %  
 Design SS removal 85 %  
 Design P removal \_\_\_\_\_ %  
 Design N removal \_\_\_\_\_ %  
 Other \_\_\_\_\_ %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

UV disinfection

If disinfection is by chlorination, is dechlorination used for this outfall?

☐ Yes ☐ No

d. Does the treatment plant have post aeration?

☒ Yes ☐ No

**A.12. Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.0	s.u.	7.6	s.u.	48
pH (Maximum)	9.7	s.u.	—	—	—
Flow Rate	1.03	MGD	0.67	MGD	47
Temperature (Winter) Jan - Mar	12.8	Celsius	16.3	Celsius	48
Temperature (Summer) Mar - May	21.7	Celsius	—	—	—

\* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD standard methods	ML / MDL Detection limits?
	Conc.	Units	Conc.	Units	Number of Samples		

## CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	9.6	mg/L	4.0	mg/L	15	5210 B	0.1
	CBOD-5	—	—	—	—	—	—	—
FECAL COLIFORM		9	colonies	2	col.	17	9222D	1 e.c.
TOTAL SUSPENDED SOLIDS (TSS)		18	mg/L	8	mg/L	17	2540B	1

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

**FACILITY NAME AND PERMIT NUMBER:**

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Form Approved 1/14/99  
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).**All applicants with a design flow rate  $\geq 0.1$  mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

**B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.  
\_\_\_\_\_ gpd up to 50% of flow during a heavy rain event

Briefly explain any steps underway or planned to minimize inflow and infiltration.

There should be very little I & I from NAS to the treatment plant because of the new pipe lines. The infiltration must be located on the NAS facility.

**B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

All maps were sent in March on the original deadline date.

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

**B.3. Process Flow Diagram or Schematic.** Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g. chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

**B.4. Operation/Maintenance Performed by Contractor(s).**Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Responsibilities of Contractor: \_\_\_\_\_

**B.5. Scheduled Improvements and Schedules of Implementation.** Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.  
\_\_\_\_\_ n/a

- b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.  
\_\_\_\_\_ Yes ☒ No

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- c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).  
n/a

- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule	Actual Completion
	MM/DD/YYYY	MM/DD/YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: \_\_\_\_\_

## B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	report limits ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS: standard methods★							
AMMONIA (as N)	1.1	mg/L	0.6	mg/L	17	4500NH3B★	0.1
CHLORINE (TOTAL RESIDUAL, TRC)	0.06	mg/L	0.03	mg/L	9	4500CIG★	0.01
DISSOLVED OXYGEN	12.8	mg/L	8.6	mg/L	47	4500-OG★	0.1
TOTAL KJELDAHL NITROGEN (TKN)	2.24	ppm	1.77	ppm	3	4500-NB★	0.01
NITRATE PLUS NITRITE NITROGEN	0.084	ppm	0.610	ppm	3	353.2	0.001
OIL and GREASE	4.6	ppm	2.7	ppm	3	1664	1.0
PHOSPHORUS (Total)	0.410	ppm	0.787	ppm	3	365.4	0.001
TOTAL DISSOLVED SOLIDS (TDS)	82.0	ppm	69.0	ppm	3	160.1	0.01
OTHER Hardness	137064.19	as CaCO3	87,806.99	as CaCO3	3	130.2	-

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

**FACILITY NAME AND PERMIT NUMBER:**

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☒ Part D (Expanded Effluent Testing Data)

☒ Part E (Toxicity Testing: Biomonitoring Data)

☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

☐ Part G (Combined Sewer Systems)

**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Yolanda C. Brown, Chief U.P.O.

Signature Yolanda C. Brown

Telephone number (601) 485-1815

Date signed July 9, 2004

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

**SEND COMPLETED FORMS TO:**

FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## SUPPLEMENTAL APPLICATION INFORMATION

## PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

**Effluent Testing: 1.0 mgd and Pretreatment Treatment Works.** If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
<b>METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.</b>											
ANTIMONY	ND	ppb			ND	ppb			12	200.7	10.0
ARSENIC	ND	ppb			ND	ppb			12	206.2	10.0
BERYLLIUM	ND	ppb			ND	ppb			12	200.7	5.0
CADMIUM	21.0	ppb			8.3	ppb			12	213.1	1.0
CHROMIUM	400	ppb			131.7	ppb			12	218.1	5.0
COPPER	18.0	ppb			11.4	ppb			12	220.1	10.0
LEAD	1450	ppb			821.7	ppb			12	239.1	5.0
MERCURY	.761	ppb			.345	ppb			12	1631E	0.0002
NICKEL	150	ppb			61.4	ppb			12	249.2	5.0
SELENIUM	ND	ppb			ND	ppb			12	270.2	2.0
SILVER	1.0	ppb			1.0	ppb			12	272.1	2.0
THALLIUM	ND	ppb			ND	ppb			12	279.2	10.0
ZINC	115	ppb			40	ppb			12	289.1	50
CYANIDE	ND	ppb			ND	ppb			12	335.2	10.0
TOTAL PHENOLIC COMPOUNDS	ND	ppb			ND	ppb			12	625	10.0
HARDNESS (AS CaCO <sub>3</sub> )	137,064.19	asCaCO <sub>3</sub>			87,806.99	asCaCO <sub>3</sub>			3	130.2	
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

## FACILITY NAME AND PERMIT NUME.

East Meridian WWT - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	ND	ppb			ND	ppb			3	624	5.0
ACRYLONITRILE											5.0
BENZENE											1.0
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYL VINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

## FACILITY NAME AND PERMIT NUMB

Form Approved 1/14/99  
OMB Number 2040-0086

East Meridian WWTP - MS0055735

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE	ND	ppb			ND	ppb			3	624	1.0
1,1,2-TRICHLOROETHANE	↓	↓			↓	↓			↓	↓	↓
TRICHLORETHYLENE	↓	↓			↓	↓			↓	↓	↓
VINYL CHLORIDE	↓	↓			↓	↓			↓	↓	↓

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

## ACID-EXTRACTABLE COMPOUNDS

P-CHLORO-M-CRESOL	ND	ppb			ND	ppb			3	625	10.0
2-CHLOROPHENOL	↓	↓			↓	↓			↓	↓	↓
2,4-DICHLOROPHENOL	↓	↓			↓	↓			↓	↓	↓
2,4-DIMETHYLPHENOL	↓	↓			↓	↓			↓	↓	↓
4,6-DINITRO-O-CRESOL	↓	↓			↓	↓			↓	↓	↓
2,4-DINITROPHENOL	↓	↓			↓	↓			↓	↓	↓
2-NITROPHENOL	↓	↓			↓	↓			↓	↓	↓
4-NITROPHENOL	↓	↓			↓	↓			↓	↓	↓
PENTACHLOROPHENOL	↓	↓			↓	↓			↓	↓	↓
PHENOL	↓	↓			↓	↓			↓	↓	↓
2,4,6-TRICHLOROPHENOL	↓	↓			↓	↓			↓	↓	↓

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

## BASE-NEUTRAL COMPOUNDS.

ACENAPHTHENE	ND	ppb			ND	ppb			3	625	10.0
ACENAPHTHYLENE	↓	↓			↓	↓			↓	↓	↓
ANTHRACENE	↓	↓			↓	↓			↓	↓	↓
BENZIDINE	↓	↓			↓	↓			↓	↓	↓
BENZO(A)ANTHRACENE	↓	↓			↓	↓			↓	↓	↓

BENZO(A)PYRENE	ND	ppb			ND	ppb			3	625	10.0
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**FACILITY NAME AND PERMIT NUMBER:**  
 East Meridian WWTP - MS0055735

Form Approved 1/14/99  
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Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE	ND	ppb			ND	ppb			3	625	10.0
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1,4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											

1,2-DIPHENYLHYDRAZINE	ND	ppb			ND	ppb			3	625	10.0
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**FACILITY NAME AND PERMIT NUMBER:**

East Meridian WWT - MS0055735

Form Approved 1/14/99  
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Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	ND	ppb			ND	ppb			3	625	10.0
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

**END OF PART D.**  
**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWP- MS0055735

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## SUPPLEMENTAL APPLICATION INFORMATION

## PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

## E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

☒ chronic ☐ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 1aTest number: 1bTest number: —

## a. Test information.

Test species & test method number	ceriodaphnia Dubia	pimephales promelas	Method
Age at initiation of test	< 24 hours old	< 24 hours old	1000.0
Outfall number	001	001	—
Dates sample collected	Feb 9th, 11th & 13th	2004	—
Date test started	Feb 10, 12, & 14	2004	—
Duration	7 days	7 days	—

## b. Give toxicity test methods followed.

Manual title	EPA/600/4-91/002, Short-term methods for estimating the Chronic Toxicity of effluents and receiving waters to Freshwater organisms, 3rd edition, July 1994
Edition number and year of publication	
Page number(s)	n/a

## c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite	6 hour composite	6 hr	—
Grab			—

## d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection	X	X	—
After dechlorination			

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTP - MS0055735

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Test number: 1a

Test number: 1b

Test number: -

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

in effluent discharge channel, after UV disinfection &  
before discharge to creek

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

x

x

-

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

x

x

-

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

x

x

-

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Synthetic, moderately hard diluted mineral water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

0, 6.25, 12.50, 25, 50, 100

-

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

8.7 - 9.4

8.7 - 9.4

-

Salinity

-

-

-

Temperature

25 degrees C + 1 degrees

25 degree C

-

Ammonia

-

-

-

Dissolved oxygen

8.2 - 10.1

8.2 - 9.3

-

l. Test Results.

Acute: n/a

Percent survival in 100%  
effluent

%

%

%

LC<sub>50</sub>

95% C.I.

Control percent survival

Other (describe)

%

%

%

%

%

## FACILITY NAME AND PERMIT NUMBER

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## Chronic:

NOEC	%	%	%
IC <sub>25</sub>	12.71 %	> 100% %	- %
Control percent survival	%	%	%
Other (describe)			

## m. Quality Control/Quality Assurance.

Is reference toxicant data available?	Hach Water Analysis Handbook		-
Was reference toxicant test within acceptable bounds?	yes	yes	-
What date was reference toxicant test run (MM/DD/YYYY)?	date of test	date of test	-
Other (describe)			

## E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

☐ Yes ☒ No

If yes, describe:

## E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

N/A

Date submitted: (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

## FACILITY NAME AND PERMIT NUM

East Meridian WWTP - MS0055735

Form Approved 11/14/99  
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## SUPPLEMENTAL APPLICATION INFORMATION

## PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

## E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

☒ chronic ☐ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 2a

Test number: 2b

Test number: -

## a. Test information.

Test species & test method number	Ceriodaphnia Dubia	Pimephales promelas	Method #1000.0
Age at initiation of test	< 24 hours old	< 24 hrs	-
Outfall number	001	001	-
Dates sample collected	April 5, 7, & 9 2004		-
Date test started	April 6, 8, & 10 2004		-
Duration	7 days	7 days	-

## b. Give toxicity test methods followed.

Manual title	EPA/600/4-91/002, Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms, 3rd edition July 1994		
Edition number and year of publication			
Page number(s)	n/a		

## c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite	6 hour composite	6 hr	-
Grab			

## d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection	x	x	-
After dechlorination			

## FACILITY NAME AND PERMIT NUI

East Meridian WWTP - MS0055735

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Test number: 2a

Test number: 2b

Test number: —

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

In effluent discharge channel

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity	X	X	—
Acute toxicity			

g. Provide the type of test performed.

Static			
Static-renewal	X	X	—
Flow-through			

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water	X	X	—
Receiving water			

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water	Synthetic, moderately hard diluted mineral water		
Salt water			

j. Give the percentage effluent used for all concentrations in the test series.

	0, 6.25, 12.50, 25, 50, 100	—

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH	7.5-9.4	7.5 - 9.4	—
Salinity	—	—	—
Temperature	25 degree C	25 degree C	—
Ammonia	—	—	—
Dissolved oxygen	7.9 - 9.1	7.9 - 9.1	—

l. Test Results.

Acute: n/a

Percent survival in 100% effluent	%	%	%
LC <sub>50</sub>			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

FACILITY NAME AND PERMIT NUMBER

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Chronic:

NOEC	%	%	%
IC <sub>25</sub>	5.38	7 100	-
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?	Hach Water Analysis	Handbook	-
Was reference toxicant test within acceptable bounds?	yes	yes	-
What date was reference toxicant test run (MM/DD/YYYY)?	Date of test	date of test	-
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

☐ Yes ☒ No

If yes, describe:

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

N/A

Date submitted: (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.  
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

**FACILITY NAME AND PERMIT NUMBER:**

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086**SUPPLEMENTAL APPLICATION INFORMATION****PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES** N/A

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

**GENERAL INFORMATION:**

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

\_\_\_ Yes \_\_\_ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. \_\_\_\_\_

b. Number of CIUs. \_\_\_\_\_

**SIGNIFICANT INDUSTRIAL USER INFORMATION:**

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): \_\_\_\_\_

Raw material(s): \_\_\_\_\_

**F.6. Flow Rate.**

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

\_\_\_\_\_ gpd (\_\_\_ continuous or \_\_\_ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

\_\_\_\_\_ gpd (\_\_\_ continuous or \_\_\_ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits \_\_\_ Yes \_\_\_ No

b. Categorical pretreatment standards \_\_\_ Yes \_\_\_ No

If subject to categorical pretreatment standards, which category and subcategory?

\_\_\_\_\_

## FACILITY NAME AND PERMIT NUMBER

East Meridian WWTW - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

**F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

☐ Yes ☐ No

If yes, describe each episode.

**RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:**

**F.9. RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?  
☐ Yes ☐ No (go to F.12.)

**F.10. Waste Transport.** Method by which RCRA waste is received (check all that apply):

☐ Truck ☐ Rail ☐ Dedicated Pipe

**F.11. Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units
----------------------------	--------	-------

_____	_____	_____
_____	_____	_____
_____	_____	_____

**CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:**

**F.12. Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.)☐ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

**F.13. Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA or other remedial waste originates (or is expected to originate in the next five years).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**F.14. Pollutants.** List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**F.15. Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

\_\_\_\_\_  
\_\_\_\_\_

b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous☐ Intermittent

If intermittent, describe discharge schedule.

**END OF PART F.**

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

## FACILITY NAME AND PERMIT NUMBER:

East Meridian WWTP - MS0055735

Form Approved 1/14/99  
OMB Number 2040-0086

## SUPPLEMENTAL APPLICATION INFORMATION

## PART G. COMBINED SEWER SYSTEMS N/A

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

## CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

## G.3. Description of Outfall.

- Outfall number \_\_\_\_\_
- Location  
(City or town, if applicable) \_\_\_\_\_ (Zip Code) \_\_\_\_\_  
(County) \_\_\_\_\_ (State) \_\_\_\_\_  
(Latitude) \_\_\_\_\_ (Longitude) \_\_\_\_\_
- Distance from shore (if applicable) \_\_\_\_\_ ft.
- Depth below surface (if applicable) \_\_\_\_\_ ft.
- Which of the following were monitored during the last year for this CSO?  
\_\_\_\_ Rainfall      \_\_\_\_ CSO pollutant concentrations      \_\_\_\_ CSO frequency  
\_\_\_\_ CSO flow volume      \_\_\_\_ Receiving water quality
- How many storm events were monitored during the last year? \_\_\_\_\_

## G.4. CSO Events.

- Give the number of CSO events in the last year.  
\_\_\_\_\_ events (\_\_\_\_ actual or \_\_\_\_ approx.)
- Give the average duration per CSO event.  
\_\_\_\_\_ hours (\_\_\_\_ actual or \_\_\_\_ approx.)

**FACILITY NAME AND PERMIT NUMBER**

East Meridian WWTP - MS0055735

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c. Give the average volume per CSO event.

\_\_\_\_\_ million gallons (\_\_\_\_\_ actual or \_\_\_\_\_ approx.)

d. Give the minimum rainfall that caused a CSO event in the last year.

\_\_\_\_\_ inches of rainfall

**G.5. Description of Receiving Waters.**

a. Name of receiving water: \_\_\_\_\_

b. Name of watershed/river/stream system: \_\_\_\_\_

United States Soil Conservation Service 14-digit watershed code (if known): \_\_\_\_\_

c. Name of State Management/River Basin: \_\_\_\_\_

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): \_\_\_\_\_

**G.6. CSO Operations.**

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

\_\_\_\_\_  
\_\_\_\_\_

**END OF PART G.**

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.**

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# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: ~~01-26-04~~

COMMENTS: METALS

DATE ANALYZED: 01-30-04

CTL SAMPLE ID: 04-1266 & 04-1267

CTL JOB NUMBER: 20040639

## ANALYTICAL RESULTS

ANALYTE	INFLUENT 04-1266	EFFLUENT 04-1267	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	3:55
ARSENIC	ND	ND	ppb	10.0	1	206.2	3:55
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	3:55
CADMIUM	35.5	21.0	ppb	1.0	1	213.1	4:39
CHROMIUM	99.0	78.0	ppb	5.0	1	218.1	11:40
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	2:17
COPPER	30.0	9.0	ppb	10.0	1	220.1	4:33
CYANIDE	ND	ND	ppb	10.0	1	335.2	3:15
LEAD	1430.0	1230.0	ppb	5.0	1	239.1	4:06
MERCURY	0.436	0.382	ppb	0.0002	1	1631E	4:02
NICKEL	ND	ND	ppb	5.0	1	249.2	11:59
SELENIUM	ND	ND	ppb	2.0	1	270.2	3:55
SILVER	ND	ND	ppb	2.0	1	272.1	4:28
THALLIUM	ND	ND	ppb	10.0	1	279.2	3:55
ZINC	65.0	32.5	ppb	50.0	1	289.1	4:12

Reviewed by:

Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D  
HATTIESBURG, MS 39401  
(601) 583-0411  
FAX: (601) 582-8163  
E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 01-28-04

COMMENTS: INFLUENT PHENOLS

DATE ANALYZED: 01-30-04

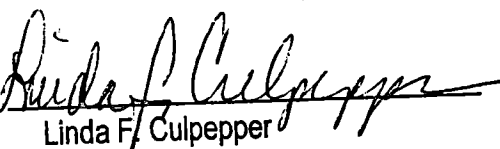
CTL SAMPLE ID: 04-1266

CTL JOB NUMBER: 20040639

## INFLUENT PHENOL

ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	50.0	5	625
2-CHLOROPHENOL	ND	ppb	50.0	5	625
2,4-DICHLOROPHENOL	ND	ppb	50.0	5	625
2,4-DIMETHYLPHENOL	ND	ppb	50.0	5	625
2,4-DINITROPHENOL	ND	ppb	50.0	5	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	50.0	5	625
2-NITROPHENOL	ND	ppb	50.0	5	625
4-NITROPHENOL	ND	ppb	50.0	5	625
PENTACHLOROPHENOL	ND	ppb	50.0	5	625
PHENOL	ND	ppb	50.0	5	625
2,4,6-TRICHLOROPHENOL	ND	ppb	50.0	5	625

Reviewed by

  
Linda F. Culpepper

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301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 01-28-04

COMMENTS: EFFLUENT PHENOLS

DATE ANALYZED: 01-30-04

CTL SAMPLE ID: 04-1267

CTL JOB NUMBER: 20040639

EFFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

Linda F. Culpepper

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301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 01-28-04

COMMENTS: SEMI VOLATILE

DATE ANALYZED: 01-30-04

CTL SAMPLE ID: 04-1267

CTL JOB NUMBER: 20040639

SEMI-VOLATILES <i>from water &amp; sample</i>					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
ACENAPHTHENE	ND	ppb	10.0	1	625
ACENAPHTHYLENE	ND	ppb	10.0	1	625
ANTHRACENE	ND	ppb	10.0	1	625
BENZIDINE	ND	ppb	10.0	1	625
BENZO(a)ANTHRACENE	ND	ppb	10.0	1	625
BENZO(a)PYRENE	ND	ppb	10.0	1	625
BENZO(b)FLUORANTHENE	ND	ppb	10.0	1	625
BENZO(g,h,i)PERYLENE	ND	ppb	10.0	1	625
BENZO(k)FLUORANTHENE	ND	ppb	10.0	1	625
4-BROMOPHENYLPHENYLETHER	ND	ppb	10.0	1	625
BUTYLBENZYLPHTHALATE	ND	ppb	10.0	1	625
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
BIS(2-CHLOROETHOXY)METHANE	ND	ppb	10.0	1	625
BIS(2-CHLOROETHYL)ETHER	ND	ppb	10.0	1	625

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COLLECTED BY: CLIENT

SAMPLE DATE: 01-28-04

COMMENTS: SEMI VOLATILE

DATE ANALYZED: 01-30-04

CTL SAMPLE ID: 04-1267

CTL JOB NUMBER: 20040639

## SEMI-VOLATILES

ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
BIS(2-CHLOROISOPROPYL)ETHER	ND	ppb	10.0	1	625
2-CHLORONAPHTHALENE	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
4-CHLOROPHENYLPHENYLETHER	ND	ppb	10.0	1	625
CHRYSENE	ND	ppb	10.0	1	625
DIBENZ(a,h)ANTHRACENE	ND	ppb	10.0	1	625
1,2-DICHLOROBENZENE	ND	ppb	10.0	1	625
1,3-DICHLOROBENZENE	ND	ppb	10.0	1	625
1,4-DICHLOROBENZENE	ND	ppb	10.0	1	625
3,3'-DICHLOROBENZIDINE	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
DIETHYLPHTHALATE	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
DIMETHYLPHTHALATE	ND	ppb	10.0	1	625
DI-N-BUTYLPHTHALATE	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625

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REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 01-28-04

COMMENTS: SEMI VOLATILES

DATE ANALYZED: 01-30-04

CTL SAMPLE ID: 04-1267

CTL JOB NUMBER: 20040639

## SEMI-VOLATILES

ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
2,4-DINITROTOLUENE	ND	ppb	10.0	1	625
2,6-DINITROTOLUENE	ND	ppb	10.0	1	625
DI-N-OCTYLPHTHALATE	ND	ppb	10.0	1	625
1,2-DIPHENYLHYDRAZINE	ND	ppb	10.0	1	625
FLUORANTHENE	ND	ppb	10.0	1	625
FLUORENE	ND	ppb	10.0	1	625
HEXACHLOROBENZENE	ND	ppb	10.0	1	625
HEXACHLOROBUTADIENE	ND	ppb	10.0	1	625
HEXACHLOROCYCLOPENTADIENE	ND	ppb	10.0	1	625
HEXACHLOROETHANE	ND	ppb	10.0	1	625
INDENO(1,2,3-CD)PYRENE	ND	ppb	10.0	1	625
ISOPHORONE	ND	ppb	10.0	1	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
NAPHTHALENE	ND	ppb	10.0	1	625
NITROBENZENE	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625

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REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 01-28-04

COMMENTS: SEMI-VOLATILES

DATE ANALYZED: 01-30-04

CTL SAMPLE ID: 04-1267

CTL JOB NUMBER: 20040639

## SEMI-VOLATILES

ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-NITROPHENOL	ND	ppb	10.0	1	625
N-NITROSODI-N-PROPYLAMINE	ND	ppb	10.0	1	625
N-NITROSODIPHENLAMINE	ND	ppb	10.0	1	625
N-NITROSODIMETHYLAMINE	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENANTHRENE	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
PYRENE	ND	ppb	10.0	1	625
BIS(2-ETHYLHEXYL)PHTHALATE	ND	ppb	10.0	1	625
1,2,4-TRICHLOROBENZENE	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

ND = NON DETECT

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 01-28-04

COMMENTS: VOLATILES

DATE ANALYZED: 01-30-04

CTL SAMPLE ID: 04-1267

CTL JOB NUMBER: 20040639

## VOLATILES

ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
✓ ACROLEIN	ND	ppb	5.0	1	624
✓ ACRYLONITRILE	ND	ppb	5.0	1	624
✓ BENZENE	ND	ppb	1.0	1	624
✓ BROMOFORM	ND	ppb	1.0	1	624
✓ BROMOMETHANE	ND	ppb	1.0	1	624
✓ CARBON TETRACHLORIDE	ND	ppb	1.0	1	624
✓ CHLOROBENZENE	ND	ppb	1.0	1	624
✓ CHLOROETHANE	ND	ppb	1.0	1	624
✓ CHLOROFORM	ND	ppb	1.0	1	624
✓ CHLOROMETHANE	ND	ppb	1.0	1	624
✓ DIBROMOCHLOROMETHANE	ND	ppb	1.0	1	624
1,2-DICHLOROBENZENE	ND	ppb	1.0	1	624
1,3-DICHLOROBENZENE	ND	ppb	1.0	1	624
1,4-DICHLOROBENZENE	ND	ppb	1.0	1	624

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 01-28-04

COMMENTS: VOLATILES

DATE ANALYZED: 01-30-04

CTL SAMPLE ID: 04-1267

CTL JOB NUMBER: 20040639

## VOLATILES

ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
DICHLORODIFLUROMETHANE	ND	ppb	1.0	1	624
✓ 1,1-DICHLOROETHANE	ND	ppb	1.0	1	624
✓ 1,2-DICHLOROETHANE	ND	ppb	1.0	1	624
1,1-DICHLOROETHENE	ND	ppb	1.0	1	624
✓ 1,2-DICHLOROETHENE (TOTAL)	ND	ppb	1.0	1	624
✓ 1,2-DICHLOROPROPANE	ND	ppb	1.0	1	624
CIS-1,3-DICHLOROPROPENE	ND	ppb	1.0	1	624
✓ TRANS-1,3-DICHLOROPROENE	ND	ppb	1.0	1	624
✓ ETHYLBENZENE	ND	ppb	1.0	1	624
✓ METHYLENE CHLORIDE	ND	ppb	2.5	1	624
1,1,2,2-TETRACHLOROETHANE	ND	ppb	1.0	1	624
✓ TETRACHLOROETHENE	ND	ppb	1.0	1	624
✓ TOLUENE	ND	ppb	1.0	1	624
✓ 1,1,1-TRICHLOROETHANE	ND	ppb	1.0	1	624
✓ 1,1,2-TRICHLOROETHANE	ND	ppb	1.0	1	624
TRICHLOROETHENE	ND	ppb	1.0	1	624

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 01-28-04

COMMENTS: VOLATILES

DATE ANALYZED: 01-28-04

CTL SAMPLE ID: 04-1267

CTL JOB NUMBER: 20040639

## VOLATILES

ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
VINYL CHLORIDE	ND	ppb	1.0	1	624
XYLENES (TOTAL)	ND	ppb	1.0	1	624
BROMODICHLOROMETHANE	ND	ppb	1.0	1	624
TRICHLOROFLUOROMETHANE	ND	ppb	1.0	1	624

ND = NON DETECT

# CULPEPPER TESTING LABORATORIES

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HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-12-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-13-04

COMMENTS: METALS

DATE ANALYZED: 02-16-04

CTL SAMPLE ID: 04-1299 & 04-1300

CTL JOB NUMBER: 20040659

## ANALYTICAL RESULTS

ANALYTE	INFLUENT 04-1299	EFFLUENT 04-1300	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	3:55
ARSENIC	ND	ND	ppb	10.0	1	206.2	3:55
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	3:55
CADMIUM	ND	ND	ppb	1.0	1	213.1	1:47
CHROMIUM	ND	ND	ppb	5.0	1	218.1	10:45
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	2:09
COPPER	ND	ND	ppb	10.0	1	220.1	10:44
CYANIDE	ND	ND	ppb	10.0	1	335.2	2:56
LEAD	965.0	330.0	ppb	5.0	1	239.1	10:10
MERCURY	1.063	0.761	ppb	0.0002	1	1631E	11:55
NICKEL	ND	ND	ppb	5.0	1	249.2	11:49
SELENIUM	ND	ND	ppb	2.0	1	270.2	3:55
SILVER	ND	ND	ppb	2.0	1	272.1	1:35
THALLIUM	ND	ND	ppb	10.0	1	279.2	3:55
ZINC	284.0	21.0	ppb	50.0	1	289.1	12:47

Reviewed by:

Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

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HATTIESBURG, MS 39401  
(601) 583-0411  
FAX: (601) 582-8163  
E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-12-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-13-04

COMMENTS: EFFLUENT PHENOLS

DATE ANALYZED: 02-16-04

CTL SAMPLE ID: 04-1300

CTL JOB NUMBER: 20040659

EFFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by

*Linda F. Culpepper*  
Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-12-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-13-04

COMMENTS: INFLUENT PHENOLS

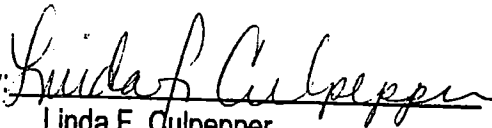
DATE ANALYZED: 02-16-04

CTL SAMPLE ID: 04-1299

CTL JOB NUMBER: 20040659

INFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	50.0	5	625
2-CHLOROPHENOL	ND	ppb	50.0	5	625
2,4-DICHLOROPHENOL	ND	ppb	50.0	5	625
2,4-DIMETHYLPHENOL	ND	ppb	50.0	5	625
2,4-DINITROPHENOL	ND	ppb	50.0	5	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	50.0	5	625
2-NITROPHENOL	ND	ppb	50.0	5	625
4-NITROPHENOL	ND	ppb	50.0	5	625
PENTACHLOROPHENOL	ND	ppb	50.0	5	625
PHENOL	95.0	ppb	50.0	5	625
2,4,6-TRICHLOROPHENOL	ND	ppb	50.0	5	625

Reviewed by:

  
Linda F. Culpepper

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301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-27-04

COMMENTS: METALS

DATE ANALYZED: 03-01-04

CTL SAMPLE ID: 04-1332 &amp; 04-1333

CTL JOB NUMBER: 20040685

**ANALYTICAL RESULTS**

A ALYTE	INFLUENT 04-1332	EFFLUENT 04-1333	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	4:10
ARSENIC	ND	ND	ppb	10.0	1	206.2	4:10
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	4:10
CADMIUM	ND	ND	ppb	1.0	1	213.1	2:45
CHROMIUM	29.0	ND	ppb	5.0	1	218.1	11:54
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	1:07
COPPER	ND	ND	ppb	10.0	1	220.1	11:44
CYANIDE	ND	ND	ppb	10.0	1	335.2	3:16
LEAD	1160.0	735.0	ppb	5.0	1	239.1	10:00
MERCURY	0.0093	0.730	ppb	0.0002	1	1631E	2:58
NICKEL	ND	ND	ppb	5.0	1	249.2	11:59
SELENIUM	ND	ND	ppb	2.0	1	270.2	4:09
SILVER	ND	ND	ppb	2.0	1	272.1	12:35
THALLIUM	ND	ND	ppb	10.0	1	279.2	4:12
ZINC	142.0	44.5	ppb	50.0	1	289.1	12:42

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HATTIESBURG, MS 39401  
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CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-27-04

COMMENTS: INFLUENT PHENOLS

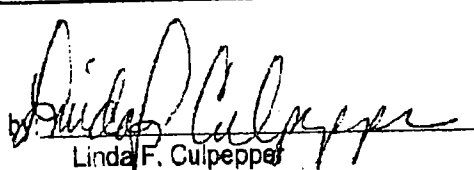
DATE ANALYZED: 03-01-04

CTL SAMPLE ID: 04-1332

CTL JOB NUMBER: 20040685

INFLUENT PHENOL						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CL	ORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CL	OROPHENOL	ND	ppb	10.0	1	625
2,4-	ICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-	IMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-	INITROPHENOL	ND	ppb	10.0	1	625
2-M	THYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-NI	ROPHENOL	ND	ppb	10.0	1	625
4-NI	ROPHENOL	ND	ppb	10.0	1	625
PEN	ACHLOROPHENOL	ND	ppb	10.0	1	625
PHE	IOL	ND	ppb	10.0	1	625
2,4,	TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

  
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HATTIESBURG, MS 39401

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CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-27-04

COMMENTS: EFFLUENT PHENOLS

DATE ANALYZED: 03-01-04

CTL SAMPLE ID: 04-1333

CTL JOB NUMBER: 20040685

EFFLUENT PHENOL						
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	
4-CLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625	
2-CLOROPHENOL	ND	ppb	10.0	1	625	
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625	
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625	
2,4-DINITROPHENOL	ND	ppb	10.0	1	625	
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625	
2-NITROPHENOL	ND	ppb	10.0	1	625	
4-NITROPHENOL	ND	ppb	10.0	1	625	
PENACHLOROPHENOL	ND	ppb	10.0	1	625	
PHEOL	ND	ppb	10.0	1	625	
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625	

Reviewed by:

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

DATE RECEIVED: 03-01-04

SAMPLE DATE: 02-27-04

COLLECTED BY: CLIENT

DATE ANALYZED: 03-01-04

CTI SAMPLE ID #: 04-1333

JOB NUMBER: 20040685

Analyte	Effluent	Units	Report Limits	Dil. Factor	Methodology
FCB	4.6	ppm	1.0	1	1664
TKN	1.4	ppm	0.01	1	4500-NB
TSS	70.0	ppm	0.01	1	160.1
PC	0.150	ppm	0.001	1	365.4
NO <sub>3</sub> /NO <sub>2</sub>	0.084	ppm	0.001	1	353.2
HARDNESS	85,298.54	as CaCO <sub>3</sub>	-----	1	130.2

Reviewed by: \_\_\_\_\_  
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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-27-04

COMMENTS: SEMI VOLATILE

DATE ANALYZED: 03-01-04

CTL SAMPLE ID: 04-1333

CTL JOB NUMBER: 20040685

SEMI-VOLATILES						
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL FACTOR	EPA METHOD	
ACE IAPHTHENE	ND	ppb	10.0	1	625	
ACE IAPHTHYLENE	ND	ppb	10.0	1	625	
ANT IRACENE	ND	ppb	10.0	1	625	
BEN IDINE	ND	ppb	10.0	1	625	
BEN O(a)ANTHRACENE	ND	ppb	10.0	1	625	
BEN O(a)PYRENE	ND	ppb	10.0	1	625	
BEN O(b)FLUORANTHENE	ND	ppb	10.0	1	625	
BEN O(g,h,i)PERYLENE	ND	ppb	10.0	1	625	
BEN O(k)FLUORANTHENE	ND	ppb	10.0	1	625	
4-BF OMOPHENYLPHENYLETHER	ND	ppb	10.0	1	625	
BUT LBENZYLPHTHALATE	ND	ppb	10.0	1	625	
4-CL ORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625	
BIS( CHLOROETHOXY)METHANE	ND	ppb	10.0	1	625	
BIS( CHLOROETHYL)ETHER	ND	ppb	10.0	1	625	

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REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-27-04

COMMENTS: SEMI VOLATILE

DATE ANALYZED: 03-01-04

CTL SAMPLE ID: 04-1333

CTL JOB NUMBER: 20040685

SEMI-VOLATILES						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
BI	2-CHLOROISOPROPYL)ETHER	ND	ppb	10.0	1	625
2-C	HLORONAPHTHALENE	ND	ppb	10.0	1	625
2-C	HLOROPHENOL	ND	ppb	10.0	1	625
4-C	HLOROPHENYLPHENYLETHER	ND	ppb	10.0	1	625
CH	YSENE	ND	ppb	10.0	1	625
DI	ENZ(a,h)ANTHRACENE	ND	ppb	10.0	1	625
1,2	DICHLOROBENZENE	ND	ppb	10.0	1	625
1,3	DICHLOROBENZENE	ND	ppb	10.0	1	625
1,4	DICHLOROBENZENE	ND	ppb	10.0	1	625
3,3	DICHLOROBENZIDINE	ND	ppb	10.0	1	625
2,4	DICHLOROPHENOL	ND	ppb	10.0	1	625
DI	ETHYLPHTHALATE	ND	ppb	10.0	1	625
2,4	DIMETHYLPHENOL	ND	ppb	10.0	1	625
DI	ETHYLPHTHALATE	ND	ppb	10.0	1	625
DI-	-BUTYLPHTHALATE	ND	ppb	10.0	1	625
2,4	DINITROPHENOL	ND	ppb	10.0	1	625

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SAMPLE DATE: 02-27-04

COMMENTS: SEMI VOLATILES

DATE ANALYZED: 03-01-04

CTL SAMPLE ID: 04-1333

CTL JOB NUMBER: 20040685

SEMI-VOLATILES						
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	
2,4-INTROTOLUENE	ND	ppb	10.0	1	625	
2,6-INTROTOLUENE	ND	ppb	10.0	1	625	
DI-N-OCTYLPHTHALATE	ND	ppb	10.0	1	625	
1,2-IPHENYLHYDRAZINE	ND	ppb	10.0	1	625	
FLUORANTHENE	ND	ppb	10.0	1	625	
FLUORENE	ND	ppb	10.0	1	625	
HEXACHLOROBENZENE	ND	ppb	10.0	1	625	
HEXACHLOROBUTADIENE	ND	ppb	10.0	1	625	
HEXACHLOROCYCLOPENTADIENE	ND	ppb	10.0	1	625	
HEXACHLOROETHANE	ND	ppb	10.0	1	625	
INDENO(1,2,3-CD)PYRENE	ND	ppb	10.0	1	625	
ISOPHORONE	ND	ppb	10.0	1	625	
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625	
NAPHTHALENE	ND	ppb	10.0	1	625	
NITROBENZENE	ND	ppb	10.0	1	625	
2-NITROPHENOL	ND	ppb	10.0	1	625	

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REPORT DATE: 04-02-04

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SAMPLE DATE: 02-27-04

COMMENTS: SEMI-VOLATILES

DATE ANALYZED: 03-01-04

CTL SAMPLE ID: 04-1333

CTL JOB NUMBER: 20040685

SEMI-VOLATILES						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-N	ROPHENOL	ND	ppb	10.0	1	625
N-N	ROSODI-N-PROPYLAMINE	ND	ppb	10.0	1	625
N-N	ROSODIPHENLAMINE	ND	ppb	10.0	1	625
N-N	ROSODIMETHYLAMINE	ND	ppb	10.0	1	625
PEN	ACHLOROPHENOL	ND	ppb	10.0	1	625
PHE	IANTHRENE	ND	ppb	10.0	1	625
PHE	IOL	ND	ppb	10.0	1	625
PYR	NE	ND	ppb	10.0	1	625
BIS	-ETHYLHEXYL)PHTHALATE	ND	ppb	10.0	1	625
1,2,	TRICHLOROBENZENE	ND	ppb	10.0	1	625
2,4,	TRICHLOROPHENOL	ND	ppb	10.0	1	625

ND = NON DETECT

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HATTIESBURG, MS 39401

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-27-04

COMMENTS: VOLATILES

DATE ANALYZED: 03-01-04

CTL SAMPLE ID: 04-1433

CTL JOB NUMBER: 20040685

VOLATILES						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
ACI	OLEIN	ND	ppb	5.0	1	624
ACI	/LONITRILE	ND	ppb	5.0	1	624
BEI	ENE	ND	ppb	1.0	1	624
BR	MOFORM	ND	ppb	1.0	1	624
BR	MOMETHANE	ND	ppb	1.0	1	624
CAI	SON TETRACHLORIDE	ND	ppb	1.0	1	624
CHI	ROBENZENE	ND	ppb	1.0	1	624
CHI	ROETHANE	ND	ppb	1.0	1	624
CHI	ROFORM	ND	ppb	1.0	1	624
CHI	ROMETHANE	ND	ppb	1.0	1	624
DIB	OMOCHLOROMETHANE	ND	ppb	1.0	1	624
1,2-	ICHLOROBENZENE	ND	ppb	1.0	1	624
1,3-	ICHLOROBENZENE	ND	ppb	1.0	1	624
1,4-	ICHLOROBENZENE	ND	ppb	1.0	1	624

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-27-04

COMMENTS: VOLATILES

DATE ANALYZED: 03-01-04

CTL SAMPLE ID: 04-1333

CTL JOB NUMBER: 20040685

VOLATILES						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
DIC	LORODIFLUROMETHANE	ND	ppb	1.0	1	624
1,1-	ICHLOROETHANE	ND	ppb	1.0	1	624
1,2-	ICHLOROETHANE	ND	ppb	1.0	1	624
1,1-	ICHLOROETHENE	ND	ppb	1.0	1	624
1,2-	ICHLOROETHENE (TOTAL)	ND	ppb	1.0	1	624
1,2-	ICHLOROPROPANE	ND	ppb	1.0	1	624
CIS	,3-DICHLOROPROPENE	ND	ppb	1.0	1	624
TRA	IS-1,3-DICHLOROPROENE	ND	ppb	1.0	1	624
ETH	LBENZENE	ND	ppb	1.0	1	624
MET	YLENE CHLORIDE	ND	ppb	2.5	1	624
1,1,2	2-TETRACHLOROETHANE	ND	ppb	1.0	1	624
TET	ACHLOROETHENE	ND	ppb	1.0	1	624
TOL	ENE	ND	ppb	1.0	1	624
1,1,1	TRICHLOROETHANE	ND	ppb	1.0	1	624
1,1,2	TRICHLOROETHANE	ND	ppb	1.0	1	624
TRIC	ILOROETHENE	ND	ppb	1.0	1	624

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-02-04

COLLECTED BY: CLIENT

SAMPLE DATE: 02-27-04

COMMENTS: VOLATILES

DATE ANALYZED: 03-01-04

CTL SAMPLE ID: 04-1333

CTL JOB NUMBER: 20040685

VOLATILES						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
VIN	CHLORIDE	ND	ppb	1.0	1	624
XYL	NES (TOTAL)	ND	ppb	1.0	1	624
BRO	MODICHLOROMETHANE	ND	ppb	1.0	1	624
TRIC	HLOROFLUOROMETHANE	ND	ppb	1.0	1	624

ND = NON DETECT

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HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-03-04

COMMENTS: METALS

DATE ANALYZED: 03-04-04

CTL SAMPLE ID: 04-1344 &amp; 04-1345

CTL JOB NUMBER: 20040694

## ANALYTICAL RESULTS

ANALYTE	INFLUENT 04-1344	EFFLUENT 04-1345	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND ✓	ppb	10.0	1	200.7	4:10
ARSENIC	ND	ND ✓	ppb	10.0	1	206.2	4:10
BERYLLIUM	ND	ND ✓	ppb	5.0	1	200.7	4:10
CADMIUM	ND	ND ✓	ppb	1.0	1	213.1	2:45
CHROMIUM	16.0	ND ✓	ppb	5.0	1	218.1	11:54
CHROMIUM (HEX)	ND	ND ✓	ppb	10.0	1	218.4	1:07
COPPER	ND	ND ✓	ppb	10.0	1	220.1	11:44
CYANIDE	ND	ND ✓	ppb	10.0	1	335.2	2:07
LEAD	1265.0	600.0 ✓	ppb	5.0	1	239.1	10:00
MERCURY	0.0974	0.0485 ✓	ppb	0.0002	1	1631E	4:58
NICKEL	ND	ND ✓	ppb	5.0	1	249.2	11:59
SELENIUM	ND	ND ✓	ppb	2.0	1	270.2	4:09
SILVER	142.0	ND ✓	ppb	2.0	1	272.1	12:35
THALLIUM	ND	ND	ppb	10.0	1	279.2	4:12
ZINC	78.0	115.0	ppb	50.0	1	289.1	12:42

Reviewed by:

Linda F. Culpepper

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REPORT DATE: 04-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-03-04

COMMENTS: INFLUENT PHENOLS

DATE ANALYZED: 03-04-04

CTL SAMPLE ID: 04-1344

CTL JOB NUMBER: 20040694

INFLUENT PHENOL						
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	
4-CL _ORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625	
2-CL _OROPHENOL	ND	ppb	10.0	1	625	
2,4-CHLOROPHENOL	ND	ppb	10.0	1	625	
2,4-IMETHYLPHENOL	ND	ppb	10.0	1	625	
2,4-INITROPHENOL	ND	ppb	10.0	1	625	
2-MI THYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625	
2-NI ROPHENOL	ND	ppb	10.0	1	625	
4-NI ROPHENOL	ND	ppb	10.0	1	625	
PEN ACHLOROPHENOL	ND	ppb	10.0	1	625	
PHE OL	19.0	ppb	10.0	1	625	
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625	

Reviewed by:

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HATTIESBURG, MS 39401

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FAX: (601) 582-8163

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CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-03-04

COMMENTS: EFFLUENT PHENOLS

DATE ANALYZED: 03-04-04

CTL SAMPLE ID: 04-1345

CTL JOB NUMBER: 20040694

EFFLUENT PHENOL						
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	
4-CLORO-3-MENTYLPHENOL	ND	ppb	10.0	1	625	
2-CLOROPHENOL	ND	ppb	10.0	1	625	
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625	
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625	
2,4-DINITROPHENOL	ND	ppb	10.0	1	625	
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625	
2-NITROPHENOL	ND	ppb	10.0	1	625	
4-NITROPHENOL	ND	ppb	10.0	1	625	
PENACHLOROPHENOL	ND	ppb	10.0	1	625	
PHEOL	ND	ppb	10.0	1	625	
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625	

Reviewed by:

Linda F. Culpepper

**CULPEPPER TESTING LABORATORIES**

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: Culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-25-04

DATE RECEIVED: 03-04-04

SAMPLE DATE: 03-03-04

COLLECTED BY: CLIENT

DATE ANALYZED: 03-04-04

CTL SAMPLE ID #: 04-1345

JOB NUMBER: 20040694

Analyte	Effluent	Units	Report Limits	Dil. Factor	Methodology
FO	2.8	ppm	1.0	1	1664
TK	2.24	ppm	0.01	1	4500-NB
TD	55.0	ppm	0.01	1	160.1
PO	0.410	ppm	0.001	1	365.4
NO NO <sub>2</sub>	0.067	ppm	0.001	1	353.2
HA DNESS	137,064.19	as CaCO <sub>3</sub>	-----	1	130.2

Reviewed by: \_\_\_\_\_

Linda F. Culpepper

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-03-04

COMMENTS: SEMI VOLATILE

DATE ANALYZED: 03-04-04

CTL SAMPLE ID: 04-1345

CTL JOB NUMBER: 20040694

SEMI-VOLATILES						
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	
ACE IAPHTHENE	ND	ppb	10.0	1	625	
ACE IAPHTHYLENE	ND	ppb	10.0	1	625	
ANT IRACENE	ND	ppb	10.0	1	625	
BEN IDINE	ND	ppb	10.0	1	625	
BEN O(a)ANTHRACENE	ND	ppb	10.0	1	625	
BEN O(a)PYRENE	ND	ppb	10.0	1	625	
BEN O(b)FLUORANTHENE	ND	ppb	10.0	1	625	
BEN O(g,h,i)PERYLENE	ND	ppb	10.0	1	625	
BEN O(k)FLUORANTHENE	ND	ppb	10.0	1	625	
4-BF OMOPHENYLPHENYLETHER	ND	ppb	10.0	1	625	
BUT LBENZYLPHTHALATE	ND	ppb	10.0	1	625	
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625	
BIS( CHLOROETHOXY)METHANE	ND	ppb	10.0	1	625	
BIS( CHLOROETHYL)ETHER	ND	ppb	10.0	1	625	

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REPORT DATE: 04-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-03-04

COMMENTS: SEMI VOLATILE

DATE ANALYZED: 03-04-04

CTL SAMPLE ID: 04-1345

CTL JOB NUMBER: 20040694

SEMI-VOLATILES						
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	
BIS (2-CHLOROISOPROPYL)ETHER	ND	ppb	10.0	1	625	
2-CHLORONAPHTHALENE	ND	ppb	10.0	1	625	
2-CHLOROPHENOL	ND	ppb	10.0	1	625	
4-CHLOROPHENYLPHENYLETHER	ND	ppb	10.0	1	625	
CHLOROPHENOL	ND	ppb	10.0	1	625	
DIBENZ(a,h)ANTHRACENE	ND	ppb	10.0	1	625	
1,2-DICHLOROBENZENE	ND	ppb	10.0	1	625	
1,3-DICHLOROBENZENE	ND	ppb	10.0	1	625	
1,4-DICHLOROBENZENE	ND	ppb	10.0	1	625	
3,3'-DICHLOROBENZIDINE	ND	ppb	10.0	1	625	
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625	
DIMETHYLPHTHALATE	ND	ppb	10.0	1	625	
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625	
DIMETHYLPHTHALATE	ND	ppb	10.0	1	625	
DINONYLPHTHALATE	ND	ppb	10.0	1	625	
2,4-DINITROPHENOL	ND	ppb	10.0	1	625	

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-03-04

COMMENTS: SEMI VOLATILES

DATE ANALYZED: 03-04-04

CTL SAMPLE ID: 04-1345

CTL JOB NUMBER: 20040694

SEMI-VOLATILES						
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL FACTOR	EPA METHOD	
2,4-INTROTOLUENE	ND	ppb	10.0	1	625	
2,6-INTROTOLUENE	ND	ppb	10.0	1	625	
DI-N-OCTYLPHTHALATE	ND	ppb	10.0	1	625	
1,2-DIPHENYLHYDRAZINE	ND	ppb	10.0	1	625	
FLUORANTHENE	ND	ppb	10.0	1	625	
FLUORENE	ND	ppb	10.0	1	625	
HEXACHLOROBENZENE	ND	ppb	10.0	1	625	
HEXACHLOROBUTADIENE	ND	ppb	10.0	1	625	
HEXACHLOROCYCLOPENTADIENE	ND	ppb	10.0	1	625	
HEXACHLOROETHANE	ND	ppb	10.0	1	625	
INDENO(1,2,3-CD)PYRENE	ND	ppb	10.0	1	625	
ISOFORONE	ND	ppb	10.0	1	625	
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625	
NAPHTHALENE	ND	ppb	10.0	1	625	
NITROBENZENE	ND	ppb	10.0	1	625	
2-NITROPHENOL	ND	ppb	10.0	1	625	

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SAMPLE DATE: 03-03-04

COMMENTS: SEMI-VOLATILES

DATE ANALYZED: 03-04-04

CTL SAMPLE ID: 04-1345

CTL JOB NUMBER: 20040694

SEMI-VOLATILES						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-NI	ROPHENOL	ND	ppb	10.0	1	625
N-N	ROSODI-N-PROPYLAMINE	ND	ppb	10.0	1	625
N-N	ROSODIPHENLAMINE	ND	ppb	10.0	1	625
N-N	ROSODIMETHYLAMINE	ND	ppb	10.0	1	625
PEM	ACHLOROPHENOL	ND	ppb	10.0	1	625
PHE	ANTHRENE	ND	ppb	10.0	1	625
PHE	OL	ND	ppb	10.0	1	625
PYR	NE	ND	ppb	10.0	1	625
BIS	(-ETHYLHEXYL)PHTHALATE	ND	ppb	10.0	1	625
1,2,	TRICHLOROBENZENE	ND	ppb	10.0	1	625
2,4,6	TRICHLOROPHENOL	ND	ppb	10.0	1	625

ND = NON DETECT

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-03-04

COMMENTS: VOLATILES

DATE ANALYZED: 03-04-04

CTL SAMPLE ID: 04-1345

CTL JOB NUMBER: 20040694

VOLATILES					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL FACTOR	EPA METHOD
ACF OLEIN	ND	ppb	5.0	1	624
ACF LONITRILE	ND	ppb	5.0	1	624
BEN ENE	ND	ppb	1.0	1	624
BRC MOFORM	ND	ppb	1.0	1	624
BRC MOMETHANE	ND	ppb	1.0	1	624
CAR ION TETRACHLORIDE	ND	ppb	1.0	1	624
CHL ROBENZENE	ND	ppb	1.0	1	624
CHL ROETHANE	ND	ppb	1.0	1	624
CHL ROFORM	ND	ppb	1.0	1	624
CHL ROMETHANE	ND	ppb	1.0	1	624
DIBI MOCHLOROMETHANE	ND	ppb	1.0	1	624
1,2-I CHLORO BENZENE	ND	ppb	1.0	1	624
1,3-I CHLORO BENZENE	ND	ppb	1.0	1	624
1,4-I CHLORO BENZENE	ND	ppb	1.0	1	624

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SAMPLE DATE: 03-03-04

COMMENTS: VOLATILES

DATE ANALYZED: 03-04-04

CTL SAMPLE ID: 04-1345

CTL JOB NUMBER: 20040694

VOLATILES						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
DIC	LORODIFLUROMETHANE	ND	ppb	1.0	1	624
1,1-	ICHLOROETHANE	ND	ppb	1.0	1	624
1,2-	ICHLOROETHANE	ND	ppb	1.0	1	624
1,1-	ICHLOROETHENE	ND	ppb	1.0	1	624
1,2-	ICHLOROETHENE (TOTAL)	ND	ppb	1.0	1	624
1,2-	ICHLOROPROPANE	ND	ppb	1.0	1	624
CIS	3-DICHLOROPROPENE	ND	ppb	1.0	1	624
TRA	IS-1,3-DICHLOROPROENE	ND	ppb	1.0	1	624
ETH	LBENZENE	ND	ppb	1.0	1	624
ME	YLENE CHLORIDE	ND	ppb	2.5	1	624
1,1,1	2-TETRACHLOROETHANE	ND	ppb	1.0	1	624
TET	ACHLOROETHENE	ND	ppb	1.0	1	624
TOL	ENE	ND	ppb	1.0	1	624
1,1,1	TRICHLOROETHANE	ND	ppb	1.0	1	624
1,1,2	TRICHLOROETHANE	ND	ppb	1.0	1	624
TRK	HLOROETHENE	ND	ppb	1.0	1	624

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REPORT DATE: 04-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-03-04

COMMENTS: VOLATILES

DATE ANALYZED: 03-04-04

CTL SAMPLE ID: 04-1345

CTL JOB NUMBER: 20040694

VOLATILES					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
VINYL CHLORIDE	ND	ppb	1.0	1	624
XYLENES (TOTAL)	ND	ppb	1.0	1	624
BROMODICHLOROMETHANE	ND	ppb	1.0	1	624
TRICHLOROFLUOROMETHANE	ND	ppb	1.0	1	624

ND = NON DETECT

**CULPEPPER TESTING LABORATORIES**

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HATTIESBURG, MS 39401

(601) 583-0411

Fax: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-16-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-15-04

COMMENTS: METALS

DATE ANALYZED: 03-16-04

CTL SAMPLE ID: 04-1379 &amp; 04-1380

CTL JOB NUMBER: 20040714

**ANALYTICAL RESULTS**

ANALYTE	INFLUENT 04-1379	EFFLUENT 04-1380	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	11:52
ARSENIC	ND	ND	ppb	10.0	1	206.2	11:52
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	11:52
CADMIUM	ND	ND	ppb	1.0	1	213.1	10:49
CHROMIUM	ND	47.0	ppb	5.0	1	218.1	11:02
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	3:04
COPPER	1.0	7.0	ppb	10.0	1	220.1	11:28
CYANIDE	ND	ND	ppb	10.0	1	335.2	3:16
LEAD	1800.0	1450.0	ppb	5.0	1	239.1	11:47
MERCURY	0.031	0.0114	ppb	0.0002	1	1631E	2:58
NICKEL	170.0	150.0	ppb	5.0	1	249.2	10:31
SELENIUM	ND	ND	ppb	2.0	1	270.2	11:52
SILVER	ND	ND	ppb	2.0	1	272.1	10:54
THALLIUM	ND	ND	ppb	10.0	1	279.2	11:52
ZINC	80.0	31.0	ppb	50.0	1	289.1	11:17

Reviewed by:

Linda F. Culpepper

**CULPEPPER TESTING LABORATORIES**

301 HARDY STREET SUITE D  
HATTIESBURG, MS 39401  
(601) 583-0411  
FAX: (601) 582-8163  
E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-16-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-15-04

COMMENTS: INFLUENT PHENOLS

DATE ANALYZED: 03-16-04

CTL SAMPLE ID: 04-1379

CTL JOB NUMBER: 20040714

INFLUENT PHENOL						
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	
4-CHLORO-3-METHYLPHENOL	ND	ppb	10.0	1	625	
2-CHLOROPHENOL	ND	ppb	10.0	1	625	
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625	
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625	
2,4-DINITROPHENOL	ND	ppb	10.0	1	625	
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625	
2-NITROPHENOL	ND	ppb	10.0	1	625	
4-NITROPHENOL	ND	ppb	10.0	1	625	
PENTACHLOROPHENOL	ND	ppb	10.0	1	625	
PHENOL	24.0	ppb	10.0	1	625	
2,4-TRICHLOROPHENOL	ND	ppb	10.0	1	625	
2,4-TRICHLOROPHENOL	ND	ppb	10.0	1	625	

Reviewed by

Linda F. Culpepper

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301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

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E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-16-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-15-04

COMMENTS: EFFLUENT PHENOLS

DATE ANALYZED: 03-16-04

CTL SAMPLE ID: 04-1380

CTL JOB NUMBER: 20040714

EFFLUENT PHENOL						
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	
4-CLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625	
2-CLOROPHENOL	ND	ppb	10.0	1	625	
2,4-ICHLOROPHENOL	ND	ppb	10.0	1	625	
2,4-IMETHYLPHENOL	ND	ppb	10.0	1	625	
2,4-INITROPHENOL	ND	ppb	10.0	1	625	
2-MTHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625	
2-NROPHENOL	ND	ppb	10.0	1	625	
4-NROPHENOL	ND	ppb	10.0	1	625	
PENTACHLOROPHENOL	ND	ppb	10.0	1	625	
PHENOL	ND	ppb	10.0	1	625	
2,4-TRICHLOROPHENOL	ND	ppb	10.0	1	625	
2,4-TRICHLOROPHENOL	ND	ppb	10.0	1	625	

Reviewed by:

Linda F. Culpepper

May 12 0 01:50p

Jennifer Culpepper

6015828163

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# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D  
HATTIESBURG, MS 39401  
(601) 583-0411  
FAX: (601) 582-8163  
E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

COLLECTED BY: CLIENT

COMMENTS: METALS

REPORT DATE: 04-30-04

SAMPLE DATE: 03-29-04

DATE ANALYZED: 03-30-04

CTL JOB NUMBER: 20040734

CTL SAMPLE ID: 04-1421 & 04-1422

ANALYTE		ANALYTICAL RESULTS						
		INFLUENT 04-1421	EFFLUENT 04-1422	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY		ND	ND	ppb	10.0	1	200.7	4:01
ARSENIC		ND	ND	ppb	10.0	1	206.2	4:01
BERYLLIUM		ND	ND	ppb	5.0	1	200.7	4:01
CADMIUM		ND	3.0	ppb	1.0	1	213.1	7:09
CHROMIUM		ND	85.0	ppb	5.0	1	218.1	5:18
CHROMIUM (HEX)		ND	ND	ppb	10.0	1	218.4	2:49
COPPER		4.0	5.0	ppb	10.0	1	220.1	12:28
CYANIDE		ND	ND	ppb	10.0	1	335.2	4:01
LEAD		1900.0	995.0	ppb	5.0	1	239.1	11:47
MERCURY		0.0593	0.0602	ppb	0.0002	1	1631E	1:54
NICKEL		240.0	125.0	ppb	5.0	1	249.2	11:51
SELENIUM		ND	ND	ppb	2.0	1	270.2	4:01
SILVER		ND	ND	ppb	2.0	1	272.1	11:12
THALLIUM		ND	ND	ppb	10.0	1	279.2	4:01
ZINC		80.0	29.0	ppb	50.0	1	289.1	10:47

Reviewed by:

Linda F. Culpepper

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301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 07-06-04

COLLECTED BY: CLIENT

SAMPLE DATE: 05-19-04

COMMENTS: METALS

DATE ANALYZED: 05-20-04

CTL SAMPLE ID: 04-1638 & 04-1639

CTL JOB NUMBER: 20040812

## ANALYTICAL RESULTS

ANALYTE	INFLUENT 04-1638	EFFLUENT 04-1639	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	3:28
ARSENIC	ND	ND	ppb	10.0	1	206.2	3:28
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	3:28
CADMIUM	ND	ND	ppb	1.0	1	213.1	5:30
CHROMIUM	53.0	49.0	ppb	5.0	1	218.1	2:15
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	2:18
COPPER	ND	18.0	ppb	10.0	1	220.1	2:19
CYANIDE	ND	ND	ppb	10.0	1	335.2	10:36
LEAD	1520.0	1050.0	ppb	5.0	1	239.1	3:01
MERCURY	1.42	0.219	ppb	0.0002	1	1631E	12:17
NICKEL	ND	ND	ppb	5.0	1	249.2	2:57
SELENIUM	ND	ND	ppb	2.0	1	270.2	3:28
SILVER	ND	ND	ppb	2.0	1	272.1	2:47
THALLIUM	ND	ND	ppb	10.0	1	279.2	3:28
ZINC	107.0	32.0	ppb	50.0	1	289.1	2:41

Reviewed by:

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 07-06-04

COLLECTED BY: CLIENT

SAMPLE DATE: 05-19-04

COMMENTS: INFLUENT PHENOLS


DATE ANALYZED: 05-20-04

CTL SAMPLE ID: 04-1638

CTL JOB NUMBER: 20040812

INFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
P-CHLORO-M-CRESOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
4,6-DINITRO-O-CRESOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	57.0	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by

  
Linda F. Culpepper

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CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 07-06-04

COLLECTED BY: CLIENT

SAMPLE DATE: 05-19-04

COMMENTS: EFFLUENT PHENOLS

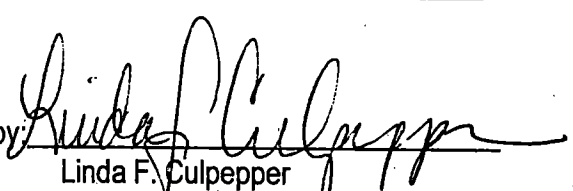
DATE ANALYZED: 05-20-04

CTL SAMPLE ID: 04-1639

CTL JOB NUMBER: 20040812

EFFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
P-CHLORO-M-CRESOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
4,6-DINITRO-O-CRESOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

  
Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D  
HATTIESBURG, MS 39401  
(601) 583-0411  
FAX: (601) 582-8163  
E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 07-06-04

COLLECTED BY: CLIENT

SAMPLE DATE: 05-28-04

COMMENTS: METALS

DATE ANALYZED: 06-01-04

CTL SAMPLE ID: 04-1648 & 04-1649

CTL JOB NUMBER: 20040820

## ANALYTICAL RESULTS

ANALYTE	INFLUENT 04-1648	EFFLUENT 04-1649	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	4:28
ARSENIC	ND	ND	ppb	10.0	1	206.2	4:28
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	4:28
CADMIUM	ND	ND	ppb	1.0	1	213.1	3:59
CHROMIUM	26.0	22.0	ppb	5.0	1	218.1	4:17
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	1:45
COPPER	ND	ND	ppb	10.0	1	220.1	4:05
CYANIDE	ND	ND	ppb	10.0	1	335.2	2:46
LEAD	510.0	140.0	ppb	5.0	1	239.1	4:14
MERCURY	5.23	0.116	ppb	0.0002	1	1631E	1:19
NICKEL	83.0	3.0	ppb	5.0	1	249.2	4:23
SELENIUM	ND	ND	ppb	2.0	1	270.2	4:28
SILVER	2.0	1.0	ppb	2.0	1	272.1	4:12
THALLIUM	ND	ND	ppb	10.0	1	279.2	4:28
ZINC	87.0	28.0	ppb	50.0	1	289.1	4:20

Reviewed by:

  
Linda F. Culpepper

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FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 07-06-04

COLLECTED BY: CLIENT

SAMPLE DATE: 05-28-04

COMMENTS: INFLUENT PHENOLS

DATE ANALYZED: 06-01-04

CTL SAMPLE ID: 04-1648

CTL JOB NUMBER: 20040820

INFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
P-CHLORO-M-CRESOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
4,6-DINITRO-O-CRESOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	12.0	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

Linda F. Culpepper

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E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 07-06-04

COLLECTED BY: CLIENT

SAMPLE DATE: 05-28-04

COMMENTS: EFFLUENT PHENOLS

DATE ANALYZED: 06-01-04

CTL SAMPLE ID: 04-1649

CTL JOB NUMBER: 20040820

EFFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
P-CHLORO-M-CRESOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
4,6-DINITRO-O-CRESOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by

Linda F. Culpepper

# *Davis Research, Inc.*

---

P.O. Box 40, Avon, MS 38723-0040    Ph. (662) 332-1943    Fax (662) 332-0081

## Test Results for City of Meridian \*

<u>Sample Description</u>	<u>Test Organism</u>	<u>ICp 25 Value (%)</u>
Effluent Sample		
	<i>Pimephales promelas</i>	>100.0
	<i>Ceriodaphnia dubia</i>	5.38

---

\*A full report on each test in enclosed.

**City of Meridian - Meridian, MS**  
Chronic Toxicity Bioassay with *Ceriodaphnia dubia*

## INTRODUCTION

A seven - day toxicity bioassay was performed by Davis Research, Inc. on samples of effluent from the wastewater treatment facility of the City of Meridian, MS..

## METHODS AND MATERIALS

The bioassay was done under the conditions and protocols specified in Method 1000.0 in EPA / 600/ 4 - 91 / 002, Short - Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms.

*Ceriodaphnia dubia*, grown in our laboratory from a starter culture obtained from Aquatic Bio Systems, Inc., Fort Collins, Colorado, was used as the test organism.

<sup>6</sup>  
The twenty-four hour composite effluent samples were collected at the City of Meridian (East) WWTP on April 5, 7, and 9, 2004. The samples were collected in plastic containers and refrigerated until used. A portion of each sample was removed and used as needed in accordance with the test protocol. The test was initiated on April 6, 2004 and terminated on April 13, 2004.

A synthetic, moderately hard diluted mineral water was prepared according to the reference cited above. The sample was tested at concentrations of 6.25 %, 12.50%, 25.00%, 50.00%, and 100.00%, with a dilution water control. Sample concentrations were made in quantities sufficient for use in the test vessels and for chemical analysis.

Each test sample concentration and the dilution water were analyzed for dissolved oxygen, pH, conductivity, temperature, alkalinity, and hardness on the first day and last day of the test. The samples were also analyzed for chlorine on the first day and on fresh samples. When fresh samples or dilution water were used, testing was done as appropriate. On the other days, measurements were made for dissolved oxygen, pH, temperature and conductivity of the dilution water control and of the sample concentrations, or as appropriate when fresh and/or dilution water were used.

Test chambers were 30 ml plastic cups. One test organism was placed into each cups which contained 15 ml of test liquid. This was replicated ten times. The test was conducted at  $25 \pm 1$  °C and with 16 hours of light and 8 hours of darkness.

The test organisms were observed daily and information on the test objectives was recorded.

## APPENDIX A.

### Summary of test conditions for *Ceriodaphnia dubia* chronic bioassay

- |   |   |
|---|---|
| 1. Test type:                             | Static renewal                                    |
| 2. Temperature:                           | 25 ± 1 °C   |
| 3. Light quality:                         | Cool - white fluorescent                          |
| 4. Light intensity:                       | 50 - 100 ft - c                                   |
| 5. Photoperiod:                           | 16 hours light, 8 hours dark                      |
| 6. Test vessel size:                      | 30 ml   |
| 7. Test solution volume:                  | 15 ml   |
| 8. Renewal:                               | Daily   |
| 9. Age of organism:                       | Less than 24 hours old                            |
| 10. Number of organisms per chamber:      | 1   |
| 11. Number of replications per treatment: | 10  |
| 12. Feeding regime:                       | Fed 0.1 ml YCT and algal suspension per cup daily |
| 13. Aeration:                             | None  |
| 14. Dilution water:                       | Synthetic, moderately hard diluted mineral water  |
| 15. Test solutions:                       | 5 effluent concentrations, 1 control              |
| 16. Dilution factor:                      | 0.5   |
| 17. Test duration:                        | 7 days  |
| 18. Effects measured:                     | Survival and reproduction                         |

**APPENDIX B.** Summary of *Ceriodaphnia dubia* survival and reproduction

<u>Concentration %</u>	<u>0.0</u>	<u>6.25</u>	<u>12.50</u>	<u>25.00</u>	<u>50.00</u>	<u>100.00</u>
No. of Young	365	259	250	258	229	234
Young per test Adult	36.5	25.9	25.0	25.8	22.9	23.4
No. of adults Surviving	10	10	9	10	10	9

Endpoints

Reproduction:

ICp25 = 5.38 % sample

## APPENDIX C.

Summary of *Ceriodaphnia dubia* survival and reproduction in the NaCl reference test

<u>g/L</u>	<u>0.0</u>	<u>1.4</u>	<u>1.8</u>	<u>2.2</u>	<u>2.6</u>	<u>3.0</u>
No. of Young	378	128	6	0	0	0
Young per test Adult	37.8	12.8	0.6	0	0	0
No. of Adults surviving	10	10	9	3	0	0

### Reference Test Endpoints

Reproduction:

ICp25 = 0.52 g/L NaCl

**Meridian, MS**  
Chronic Toxicity Bioassay with *Pimephales promelas*

## INTRODUCTION

A seven - day toxicity bioassay was performed by Davis Research, Inc. on samples of effluent from the wastewater treatment facility of the Meridian, MS.

## METHODS AND MATERIALS

The bioassay was done under the conditions and protocols specified in EPA / 600/ 4 - 91 / 002, Method 1000.0, Short - Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms.

*Pimephales promelas*, obtained from Aquatic Bio Systems, Inc., Fort Collins, Colorado , was used as the test organism.

The effluent samples were collected at the Meridian WWTP on April 5, 7 and 9, 2004. The samples were collected in plastic containers and refrigerated until used. A portion of each sample was removed and used as needed in accordance with the test protocol. The test was initiated on April 6, 2004 and terminated on April 13, 2004.

A synthetic, moderately hard diluted mineral water was prepared according to the reference cited above. The sample was tested at concentrations of 6.25 %, 12.50%, 25.00%, 50.00%, and 100.00%, with a dilution water control. Sample concentrations were made in quantities sufficient for use in the test vessels and for chemical analysis.

Each test sample concentration and the dilution water were analyzed for dissolved oxygen, pH, conductivity, temperature, alkalinity, and hardness on the first day and last day of the test. The samples were also analyzed for chlorine on the first day and on fresh samples. When fresh samples or dilution water were used, testing was done as appropriate. On the other days, measurements were made for dissolved oxygen, pH, temperature and conductivity of the dilution water control and of the sample concentrations, or as appropriate when fresh and/or dilution water were used.

Test chambers were 300 ml plastic cups. Ten test organisms were placed into each cup which contained 250 ml of test liquid. This was replicated four times. The test was conducted at  $25 \pm 1$  °C and with 16 hours of light and 8 hours of darkness.

The test organisms were observed daily and information on the test objectives was recorded.

**APPENDIX A.** Summary of test conditions for *Pimephales promelas* chronic bioassay

1. Test type:	Static renewal
2. Temperature:	25 ± 1 °C
3. Light quality:	Cool - white fluorescent
4. Light intensity:	50 - 100 ft - c
5. Photoperiod:	16 hours light, 8 hours dark
6. Test vessel size:	300 ml
7. Test solution volume:	250 ml
8. Renewal:	Daily
9. Age of organism:	Less than 24 hours old
10. Number of organisms per chamber:	10
11. Number of replications per treatment:	4
12. Feeding regime:	Fed 0.5 ml shrimp nauplii twice daily
13. Aeration:	None
14. Dilution water:	Synthetic, moderately hard diluted mineral water
15. Test solutions:	5 effluent concentrations, 1 control
16. Dilution factor:	0.5
17. Test duration:	7 days
18. Effects measured:	Survival and growth

**APPENDIX B.** Summary of *Pimephales promelas* survival and growth

<u>Sample Concentration %</u>	<u>0.0</u>	<u>6.25</u>	<u>12.50</u>	<u>25.00</u>	<u>50.00</u>	<u>100.00</u>
<u>No. of Animals</u>	40	37	29	30	29	35
<u>% Mortality</u>	0.0	7.5	27.5	25.00	27.5	12.5
Average animal dry weight at end of test (mg)	0.70	0.66	0.64	0.44	0.57	0.67

Endpoints

Growth:

ICp25 =>100.0 % sample

## APPENDIX C.

Summary of *Pimephales promelas* survival and growth in the NaCl reference test

<u>g/L</u>	<u>0.0</u>	<u>2.00</u>	<u>4.00</u>	<u>6.00</u>	<u>8.00</u>	<u>10.00</u>
<u>No. of animals</u>	40	16	21	18	0	0
<u>% Mortality</u>	0.0	60.0	47.5	55.00	100.0	100.0
Average animal dry weight at end of test (mg)	0.74	0.26	0.35	0.47	0.00	0.00

### Reference Test Endpoints

Growth:

IC<sub>p25</sub> = 0.97 g/L NaCl

Date of Reference Test:

03/30/04 - 04/06/04

# *Davis Research, Inc.*

---

P.O. Box 40, Avon, MS 38723-0040    Ph. (662) 332-1943    Fax (662) 332-0081

## Test Results for City of Meridian \*

<u>Sample Description</u>	<u>Test Organism</u>	<u>ICp 25 Value (%)</u>
Effluent Sample		
	<i>Pimephales promelas</i>	>100.0
	<i>Ceriodaphnia dubia</i>	12.71

---

\*A full report on each test in enclosed.

**Meridian, MS**  
**Chronic Toxicity Bioassay with *Pimephales promelas***

## INTRODUCTION

A seven - day toxicity bioassay was performed by Davis Research, Inc. on samples of effluent from the wastewater treatment facility of the Meridian, MS.

## METHODS AND MATERIALS

The bioassay was done under the conditions and protocols specified in EPA / 600/ 4 - 91 / 002, Method 1000.0, Short - Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms.

*Pimephales promelas*, obtained from Aquatic Bio Systems, Inc., Fort Collins, Colorado , was used as the test organism.

The effluent samples were collected at the <sup>East</sup>Meridian WWTP on February 9, 11 and 13, 2004. The samples were collected in plastic containers and refrigerated until used. A portion of each sample was removed and used as needed in accordance with the test protocol. The test was initiated on February 10, 2004 and terminated on February 17, 2004.

A synthetic, moderately hard diluted mineral water was prepared according to the reference cited above. The sample was tested at concentrations of 6.25 %, 12.50%, 25.00%, 50.00%, and 100.00%, with a dilution water control. Sample concentrations were made in quantities sufficient for use in the test vessels and for chemical analysis.

Each test sample concentration and the dilution water were analyzed for dissolved oxygen, pH, conductivity, temperature, alkalinity, and hardness on the first day and last day of the test. The samples were also analyzed for chlorine on the first day and on fresh samples. When fresh samples or dilution water were used, testing was done as appropriate. On the other days, measurements were made for dissolved oxygen, pH, temperature and conductivity of the dilution water control and of the sample concentrations, or as appropriate when fresh and/or dilution water were used.

Test chambers were 300 ml plastic cups. Ten test organisms were placed into each cup which contained 250 ml of test liquid. This was replicated four times. The test was conducted at  $25 \pm 1$  °C and with 16 hours of light and 8 hours of darkness.

The test organisms were observed daily and information on the test objectives was recorded.

## **SUMMARY OF RESULTS**

The ICp25 for growth was >100 % sample.

**APPENDIX A.** Summary of test conditions for *Pimephales promelas* chronic bioassay

1. Test type:	Static renewal
2. Temperature:	25 ± 1 °C
3. Light quality:	Cool - white fluorescent
4. Light intensity:	50 - 100 ft - c
5. Photoperiod:	16 hours light, 8 hours dark
6. Test vessel size:	300 ml
7. Test solution volume:	250 ml
8. Renewal:	Daily
9. Age of organism:	Less than 24 hours old
10. Number of organisms per chamber:	10
11. Number of replications per treatment:	4
12. Feeding regime:	Fed 0.5 ml shrimp nauplii twice daily
13. Aeration:	None
14. Dilution water:	Synthetic, moderately hard diluted mineral water
15. Test solutions:	5 effluent concentrations, 1 control
16. Dilution factor:	0.5
17. Test duration:	7 days
18. Effects measured:	Survival and growth

**APPENDIX B.** Summary of *Pimephales promelas* survival and growth

<u>Sample Concentration %</u>	<u>0.0</u>	<u>6.25</u>	<u>12.50</u>	<u>25.00</u>	<u>50.00</u>	<u>100.00</u>
<u>No. of Animals</u>	40	35	40	36	40	40
<u>% Mortality</u>	0.0	87.5	0.0	90.0	0.0	0.0
Average animal dry weight at end of test (mg)	0.73	0.63	0.61	0.67	0.72	0.74

Endpoints

Growth:

ICp25 = >100.0 % sample

**APPENDIX C.**

Summary of *Pimephales promelas* survival and growth in the NaCl reference test

<u>g/L</u>	<u>0.0</u>	<u>2.00</u>	<u>4.00</u>	<u>6.00</u>	<u>8.00</u>	<u>10.00</u>
<u>No. of animals</u>	40	23	21	6	0	0
<u>% Mortality</u>	0.0	57.5	52.5	15.0	100.0	100.0
Average animal dry weight at end of test (mg)	0.48	0.42	0.44	0.09	0.0	0.0

**Reference Test Endpoints**

Growth:

IC<sub>p25</sub> = 0.54 g/L NaCl

**City of Meridian - Meridian, MS**  
**Chronic Toxicity Bioassay with *Ceriodaphnia dubia***

## INTRODUCTION

A seven - day toxicity bioassay was performed by Davis Research, Inc. on samples of effluent from the wastewater treatment facility of the City of Meridian, MS..

## METHODS AND MATERIALS

The bioassay was done under the conditions and protocols specified in Method 1000.0 in EPA / 600/ 4 - 91 / 002, Short - Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms.

*Ceriodaphnia dubia*, grown in our laboratory from a starter culture obtained from Aquatic Bio Systems, Inc., Fort Collins, Colorado, was used as the test organism.

The <sup>6</sup>~~twenty~~-four hour composite effluent samples were collected at the City of Meridian WWTP on February 9, 11, and 13, 2004. The samples were collected in plastic containers and refrigerated until used. A portion of each sample was removed and used as needed in accordance with the test protocol. The test was initiated on February 10, 2004 and terminated on February 17, 2004. East Mn plant

A synthetic, moderately hard diluted mineral water was prepared according to the reference cited above. The sample was tested at concentrations of 6.25 %, 12.50%, 25.00%, 50.00%, and 100.00%, with a dilution water control. Sample concentrations were made in quantities sufficient for use in the test vessels and for chemical analysis.

Each test sample concentration and the dilution water were analyzed for dissolved oxygen, pH, conductivity, temperature, alkalinity, and hardness on the first day and last day of the test. The samples were also analyzed for chlorine on the first day and on fresh samples. When fresh samples or dilution water were used, testing was done as appropriate. On the other days, measurements were made for dissolved oxygen, pH, temperature and conductivity of the dilution water control and of the sample concentrations, or as appropriate when fresh and/or dilution water were used.

Test chambers were 30 ml plastic cups. One test organism was placed into each cups which contained 15 ml of test liquid. This was replicated ten times. The test was conducted at  $25 \pm 1$  °C and with 16 hours of light and 8 hours of darkness.

The test organisms were observed daily and information on the test objectives was recorded.

## SUMMARY OF RESULTS

The ICp25 for reproduction was <sup>71</sup>12.17% sample.

**APPENDIX A.**      Summary of test conditions for *Ceriodaphnia dubia* chronic bioassay

1. Test type:	Static renewal
2. Temperature:	25 ± 1 °C
3. Light quality:	Cool - white fluorescent
4. Light intensity:	50 - 100 ft - c
5. Photoperiod:	16 hours light, 8 hours dark
6. Test vessel size:	30 ml
7. Test solution volume:	15 ml
8. Renewal:	Daily
9. Age of organism:	Less than 24 hours old
10. Number of organisms per chamber:	1
11. Number of replications per treatment:	10
12. Feeding regime:	Fed 0.1 ml YCT and algal suspension per cup daily
13. Aeration:	None
14. Dilution water:	Synthetic, moderately hard diluted mineral water
15. Test solutions:	5 effluent concentrations, 1 control
16. Dilution factor:	0.5
17. Test duration:	7 days
18. Effects measured:	Survival and reproduction

**APPENDIX B.** Summary of *Ceriodaphnia dubia* survival and reproduction

<u>Concentration %</u>	<u>0.0</u>	<u>6.25</u>	<u>12.50</u>	<u>25.00</u>	<u>50.00</u>	<u>100.00</u>
No. of Young	304	227	231	166	210	228
Young per test Adult	30.4	22.7	23.1	16.6	21.0	22.8
No. of adults Surviving	10	10	10	9	10	10

Endpoints

Reproduction:

ICp25 = 21.71 % sample

## APPENDIX C.

Summary of *Ceriodaphnia dubia* survival and reproduction in the NaCl reference test

<u>g/L</u>	<u>0.0</u>	<u>1.4</u>	<u>1.8</u>	<u>2.2</u>	<u>2.6</u>	<u>3.0</u>
No. of Young	338	136	5	0	0	0
Young per test Adult	33.8	13.6	0.5	0.0	0.0	0.0
No. of Adults surviving	10	9	3	0	0	0

### Reference Test Endpoints

Reproduction:

IC<sub>p25</sub> = 0.58 g/L NaCl

# CULPEPPER TESTING LABORATORIES

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E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 07-06-04

COLLECTED BY: CLIENT

SAMPLE DATE: 05-10-04

COMMENTS: EFFLUENT PHENOLS

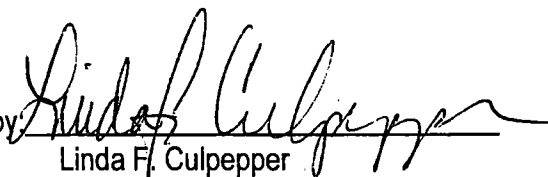
DATE ANALYZED: 05-11-04

CTL SAMPLE ID: 04-1620

CTL JOB NUMBER: 20040797

EFFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
P-CHLORO-M-CRESOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
4,6-DINITRO-O-CRESOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by

  
Linda F. Culpepper

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E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 07-06-04

COLLECTED BY: CLIENT

SAMPLE DATE: 05-10-04

COMMENTS: INFLUENT PHENOLS


DATE ANALYZED: 05-11-04

CTL SAMPLE ID: 04-1620

CTL JOB NUMBER: 20040797

INFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
P-CHLORO-M-CRESOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
4,6-DINITRO-O-CRESOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

  
Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 07-06-04

COLLECTED BY: CLIENT

SAMPLE DATE: 05-10-04

COMMENTS: METALS

DATE ANALYZED: 05-11-04

CTL SAMPLE ID: 04-1619 & 04-1620

CTL JOB NUMBER: 20040797

## ANALYTICAL RESULTS

ANALYTE	INFLUENT 04-1619	EFFLUENT 04-1620	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	9:00
ARSENIC	ND	ND	ppb	10.0	1	206.2	9:00
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	9:00
CADMIUM	ND	ND	ppb	1.0	1	213.1	4:37
CHROMIUM	92.0	44.0	ppb	5.0	1	218.1	3:09
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	4:00
COPPER	ND	18.0	ppb	10.0	1	220.1	2:44
CYANIDE	ND	ND	ppb	10.0	1	335.2	9:17
LEAD	1240.0	1200.0	ppb	5.0	1	239.1	2:26
MERCURY	1.547	0.306	ppb	0.0002	1	1631E	3:32
NICKEL	ND	ND	ppb	5.0	1	249.2	2:37
SELENIUM	ND	ND	ppb	2.0	1	270.2	9:00
SILVER	ND	ND	ppb	2.0	1	272.1	2:32
THALLIUM	ND	ND	ppb	10.0	1	279.2	9:00
ZINC	88.0	42.0	ppb	50.0	1	289.1	1:56

Reviewed by:

Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 05-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 04-30-04

COMMENTS: METALS

DATE ANALYZED: 05-03-04

CTL SAMPLE ID: 04-1492 & 04-1493

CTL JOB NUMBER: 20040784

## ANALYTICAL RESULTS

ANALYTE	INFLUENT 04-1492	EFFLUENT 04-1493	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	12:29
ARSENIC	ND	ND	ppb	10.0	1	206.2	12:29
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	12:29
CADMIUM	ND	2.0	ppb	1.0	1	213.1	11:51
CHROMIUM	27.0	64.5	ppb	5.0	1	218.1	11:42
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	3:06
COPPER	1.0	ND	ppb	10.0	1	220.11	11:55
CYANIDE	ND	ND	ppb	10.0	1	335.2	2:49
LEAD	940.0	910.0	ppb	5.0	1	239.1	12:07
MERCURY	0.513	0.375	ppb	0.0002	1	1631E	8:56
NICKEL	90.0	ND	ppb	5.0	1	249.2	12:11
SELENIUM	ND	ND	ppb	2.0	1	270.2	12:29
SILVER	ND	ND	ppb	2.0	1	272.1	12:03
THALLIUM	ND	ND	ppb	10.0	1	279.2	12:29
ZINC	137.0	33.0	ppb	50.0	1	289.1	11:59

Reviewed by:

*Linda F. Culpepper*  
Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D  
HATTIESBURG, MS 39401  
(601) 583-0411  
FAX: (601) 582-8163  
E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 05-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 04-30-04

COMMENTS: INFLUENT PHENOLS

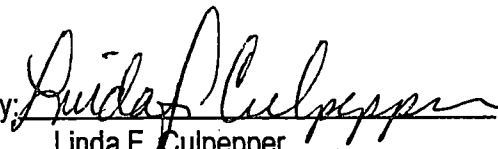
DATE ANALYZED: 05-03-04

CTL SAMPLE ID: 04-1492

CTL JOB NUMBER: 20040784

INFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	23.0	ppb	10.0	1	625
2,4,5-TRICHLOROPHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

  
Linda F. Culpepper

**CULPEPPER TESTING LABORATORIES**

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

Fax: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-16-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-15-04

COMMENTS: EFFLUENT PHENOLS

DATE ANALYZED: 03-16-04

CTL SAMPLE ID: 04-1380

CTL JOB NUMBER: 20040714

EFFLUENT PHENOL						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CL	LORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CL	LOROPHENOL	ND	ppb	10.0	1	625
2,4-	ICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-	IMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-	INITROPHENOL	ND	ppb	10.0	1	625
2-M	THYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-N	ROPHENOL	ND	ppb	10.0	1	625
4-N	ROPHENOL	ND	ppb	10.0	1	625
PEP	ACHLOROPHENOL	ND	ppb	10.0	1	625
PHI	JOL	ND	ppb	10.0	1	625
2,4,	TRICHLOROPHENOL	ND	ppb	10.0	1	625
2,4,	TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 05-25-04

COLLECTED BY: CLIENT

SAMPLE DATE: 04-30-04

COMMENTS: EFFLUENT PHENOLS

DATE ANALYZED: 05-03-04


CTL SAMPLE ID: 04-1493

CTL JOB NUMBER: 20040784

## EFFLUENT PHENOL

ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
2,4,5-TRICHLOROPHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

  
Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 05-19-04

COLLECTED BY: CLIENT

SAMPLE DATE: 04-19-04

COMMENTS: EFFLUENT PHENOLS

DATE ANALYZED: 04-20-04

CTL SAMPLE ID: 04-1471

CTL JOB NUMBER: 20040768

EFFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
2,4,5-TRICHLOROPHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

  
Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 05-19-04

COLLECTED BY: CLIENT

SAMPLE DATE: 04-19-04

COMMENTS: INFLUENT PHENOLS

DATE ANALYZED: 04-20-04

CTL SAMPLE ID: 04-1470

CTL JOB NUMBER: 20040768

INFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	16.7	1	625
2-CHLOROPHENOL	ND	ppb	16.7	1	625
2,4-DICHLOROPHENOL	ND	ppb	16.7	1	625
2,4-DIMETHYLPHENOL	ND	ppb	16.7	1	625
2,4-DINITROPHENOL	ND	ppb	16.7	1	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	16.7	1	625
2-NITROPHENOL	ND	ppb	16.7	1	625
4-NITROPHENOL	ND	ppb	16.7	1	625
PENTACHLOROPHENOL	ND	ppb	16.7	1	625
PHENOL	ND	ppb	16.7	1	625
2,4,5-TRICHLOROPHENOL	ND	ppb	16.7	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	16.7	1	625

Reviewed by:

  
Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 05-19-04

COLLECTED BY: CLIENT

SAMPLE DATE: 04-19-04

COMMENTS: METALS

DATE ANALYZED: 04-20-04

CTL SAMPLE ID: 04-1470 & 04-1471

CTL JOB NUMBER: 20040768

## ANALYTICAL RESULTS

ANALYTE	INFLUENT 04-1470	EFFLUENT 04-1471	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	10:20
ARSENIC	ND	ND	ppb	10.0	1	206.2	10:20
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	10:20
CADMIUM	ND	7.0	ppb	1.0	1	213.1	4:46
CHROMIUM	142.0	396.0	ppb	5.0	1	218.1	6:01
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	2:04
COPPER	ND	ND	ppb	10.0	1	220.1	4:50
CYANIDE	ND	ND	ppb	10.0	1	335.2	2:09
LEAD	1270.0	550.0	ppb	5.0	1	239.1	12:07
MERCURY	0.511	0.607	ppb	0.0002	1	1631E	5:07
NICKEL	21.0	16.0	ppb	5.0	1	249.2	4:39
SELENIUM	ND	ND	ppb	2.0	1	270.2	10:20
SILVER	ND	ND	ppb	2.0	1	272.1	5:27
THALLIUM	ND	ND	ppb	10.0	1	279.2	10:20
ZINC	98.0	36.0	ppb	50.0	1	289.1	11:59

Reviewed by:

Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D  
HATTIESBURG, MS 39401  
(601) 583-0411  
FAX: (601) 582-8163  
E-mail: Culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 05-19-04

DATE RECEIVED: 04-08-04

SAMPLE DATE: 04-07-04

COLLECTED BY: CLIENT

DATE ANALYZED: 04-08-04

CTL SAMPLE ID #: 04-1445

JOB NUMBER: 20040751

Analyte	Effluent	Units	Report Limits	Dil. Factor	Methodology
FOG	0.6	ppm	1.0	1	1664
TKN	1.68	ppm	0.01	1	4500-NB
TDS	82.0	ppm	0.01	1	160.1
PO <sub>4</sub>	1.8	ppm	0.001	1	365.4
NO <sub>3</sub> /NO <sub>2</sub>	0.0321	ppm	0.001	1	353.2
HARDNESS	41,058.24	as CaCO <sub>3</sub>	-----	1	130.2

Reviewed by:

  
Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 05-19-04

COLLECTED BY: CLIENT

SAMPLE DATE: 04-07-04

COMMENTS: EFFLUENT PHENOLS


DATE ANALYZED: 04-08-04

CTL SAMPLE ID: 04-1445

CTL JOB NUMBER: 20040751

EFFLUENT PHENOL					
ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
2,4,5-TRICHLOROPHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by

  
Linda F. Culpepper

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301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 05-19-04

COLLECTED BY: CLIENT

SAMPLE DATE: 04-07-04

COMMENTS: INFLUENT PHENOLS

DATE ANALYZED: 04-08-04

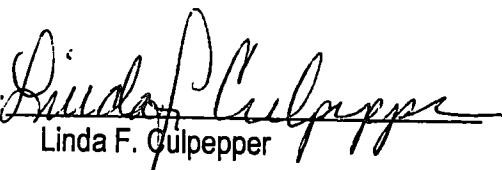
CTL SAMPLE ID: 04-1444

CTL JOB NUMBER: 20040751

## INFLUENT PHENOL

ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CHLORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-DIMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-DINITROPHENOL	ND	ppb	10.0	1	625
2-METHYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-NITROPHENOL	ND	ppb	10.0	1	625
4-NITROPHENOL	ND	ppb	10.0	1	625
PENTACHLOROPHENOL	ND	ppb	10.0	1	625
PHENOL	ND	ppb	10.0	1	625
2,4,5-TRICHLOROPHENOL	ND	ppb	10.0	1	625
2,4,6-TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

  
Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 05-19-04

COLLECTED BY: CLIENT

SAMPLE DATE: 04-07-04

COMMENTS: METALS

DATE ANALYZED: 04-08-04

CTL SAMPLE ID: 04-1444 & 04-1445

CTL JOB NUMBER: 20040751

## ANALTICAL RESULTS

ANALYTE	INFLUENT 04-1444	EFFLUENT 04-1445	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	9:20
ARSENIC	ND	ND	ppb	10.0	1	206.2	9:20
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	9:20
CADMIUM	13.0	ND	ppb	1.0	1	213.1	6:00
CHROMIUM	89.0	400.0	ppb	5.0	1	218.1	4:55
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	2:57
COPPER	ND	ND	ppb	10.0	1	220.1	4:06
CYANIDE	ND	ND	ppb	10.0	1	335.2	3:07
LEAD	1000.0	670.0	ppb	5.0	1	239.1	4:21
MERCURY	1.63	0.522	ppb	0.0002	1	1631E	5:04
NICKEL	14.0	13.0	ppb	5.0	1	249.2	5:49
SELENIUM	ND	ND	ppb	2.0	1	270.2	9:20
SILVER	ND	ND	ppb	2.0	1	272.1	6:36
THALLIUM	ND	ND	ppb	10.0	1	279.2	9:20
ZINC	41.0	36.0	ppb	50.0	1	289.1	5:43

Reviewed by:

  
Linda F. Culpepper

**CULPEPPER TESTING LABORATORIES**

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

Fax: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-30-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-29-04

COMMENTS: EFFLUENT PHENOLS

DATE ANALYZED: 03-30-04

CTL SAMPLE ID: 04-1422

CTL JOB NUMBER: 20040734

EFFLUENT PHENOL						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CL	ORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CL	OROPHENOL	ND	ppb	10.0	1	625
2,4-	ICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-	IMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-	INITROPHENOL	ND	ppb	10.0	1	625
2-M	THYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-N	ROPHENOL	ND	ppb	10.0	1	625
4-N	ROPHENOL	ND	ppb	10.0	1	625
PEM	ACHLOROPHENOL	ND	ppb	10.0	1	625
PHI	JOL	ND	ppb	10.0	1	625
2,4,	TRICHLOROPHENOL	ND	ppb	10.0	1	625
2,4,	TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

  
Linda F. Culpepper

**CULPEPPER TESTING LABORATORIES**

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDAN WWTP

REPORT DATE: 04-30-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-29-04

COMMENTS: INFLUENT PHENOLS

DATE ANALYZED: 03-30-04

CTL SAMPLE ID: 04-1421

CTL JOB NUMBER: 20040734

INFLUENT PHENOL						
	ANALYTE	RESULT	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD
4-CL	ORO-3-MEHTYLPHENOL	ND	ppb	10.0	1	625
2-CL	OROPHENOL	ND	ppb	10.0	1	625
2,4-	ICHLOROPHENOL	ND	ppb	10.0	1	625
2,4-	IMETHYLPHENOL	ND	ppb	10.0	1	625
2,4-	INITROPHENOL	ND	ppb	10.0	1	625
2-M	THYL-4,6-DINITROPHENOL	ND	ppb	10.0	1	625
2-NI	ROPHENOL	ND	ppb	10.0	1	625
4-NI	ROPHENOL	ND	ppb	10.0	1	625
PEN	ACHLOROPHENOL	ND	ppb	10.0	1	625
PHE	IOL	0.0210	ppb	10.0	1	625
2,4,	TRICHLOROPHENOL	ND	ppb	10.0	1	625
2,4,	TRICHLOROPHENOL	ND	ppb	10.0	1	625

Reviewed by:

Linda F. Culpepper

# CULPEPPER TESTING LABORATORIES

301 HARDY STREET SUITE D

HATTIESBURG, MS 39401

(601) 583-0411

FAX: (601) 582-8163

E-mail: culpe@aol.com

CLIENT: EAST MERIDIAN WWTP

REPORT DATE: 04-30-04

COLLECTED BY: CLIENT

SAMPLE DATE: 03-29-04

COMMENTS: METALS

DATE ANALYZED: 03-30-04

CTL SAMPLE ID: 04-1421 &amp; 04-1422

CTL JOB NUMBER: 20040734

## ANALYTICAL RESULTS

ANALYTE	INFLUENT 04-1421	EFFLUENT 04-1422	UNITS	REPORT LIMITS	DIL. FACTOR	EPA METHOD	TIME
ANTIMONY	ND	ND	ppb	10.0	1	200.7	4:01
ARSENIC	ND	ND	ppb	10.0	1	206.2	4:01
BERYLLIUM	ND	ND	ppb	5.0	1	200.7	4:01
CADMIUM	ND	3.0	ppb	1.0	1	213.1	7:09
CHROMIUM	ND	85.0	ppb	5.0	1	218.1	5:18
CHROMIUM (HEX)	ND	ND	ppb	10.0	1	218.4	2:49
COPPER	4.0	5.0	ppb	10.0	1	220.1	12:28
CYANIDE	ND	ND	ppb	10.0	1	335.2	4:01
LEAD	1900.0	995.0	ppb	5.0	1	239.1	11:47
MERCURY	0.0593	0.0602	ppb	0.0002	1	1631E	1:54
NICKEL	240.0	125.0	ppb	5.0	1	249.2	11:51
SELENIUM	ND	ND	ppb	2.0	1	270.2	4:01
SILVER	ND	ND	ppb	2.0	1	272.1	11:12
THALLIUM	ND	ND	ppb	10.0	1	279.2	4:01
ZINC	80.0	29.0	ppb	50.0	1	289.1	10:47

Reviewed by:

Linda F. Culpepper



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MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

James I. Palmer, Jr., Executive Director

October 13, 1999

CERTIFIED MAIL NO. Z 353 771 075

Honorable John Robert Smith, Mayor  
City of Meridian  
P. O. Box 1430  
Meridian, Mississippi 39302-1430

Dear Mayor Smith:

Re: NPDES Permit No. MS0055735  
Proposed NAS WWTF  
Meridian, Mississippi

Enclosed is National Pollutant Discharge Elimination System (NPDES) Permit Number MS0055735, which is hereby issued to the City of Meridian. Please note the effluent limitations, schedule of compliance, monitoring requirements, and monitoring reporting dates found in this permit.

This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Sections 49-17-1, et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under the authority granted to the Mississippi Environmental Quality Permit Board pursuant to Section 402(b) of the Federal Water Pollution Control Act. Note that this decision of the Permit Board deals solely with the issuance of the referenced NPDES Permit. In the event additional approvals, permits and/or a water quality certification are required in the future, the decision on this NPDES Permit in no way predetermines the decision on any other approval, permit and/or water quality certification.

Any appeal of this permit action must be made within the 30 day period provided for in Section 49-17-29(4)(b) Mississippi Code of 1972.

Very truly yours,

Greg Burgess  
Municipal Permit Compliance Branch

TGB:tgb  
Enclosures

cc: Ms. Karrie Jo Shell, EPA (w/enclosures) ← THIS COPY FOR  
CRO (w/enclosure)

OFFICE OF POLLUTION CONTROL

P.O. Box 10385 Jackson, MS 39289.0385 Phone 601.961.5171 Fax 601.354.6612

U.S. EPA REGION 4  
SWPFB

1999 OCT 18 P 5:05

AMENDMENT TO FACT SHEET AT  
TIME OF FINAL PERMIT ISSUANCE

Name of Applicant: City of Meridian - NAS Facility  
P. O. Box 1430  
Meridian, Mississippi 39302-1430

Application No.: MS0055735

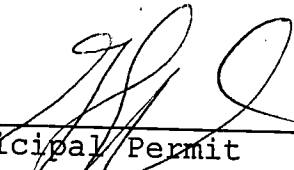
Date: October 13, 1999

1. Changes to the draft permit included:

None.

2. Public comments to the permit included:

We received 5 letters of comment from the public. The comments were not directly related to the environmental impact of the proposed discharge. The Mississippi Department of Environmental Quality Permit Board heard from the representative of the citizens who commented during public notice. After a period of questions, the Permit Board approved issuance of the NPDES permit.

  
Municipal Permit  
Compliance Coordinator

GLO:tgb

**State of Mississippi  
Water Pollution Control  
PERMIT**

**TO DISCHARGE WASTEWATER IN ACCORDANCE WITH THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**THIS CERTIFIES THAT**

**CITY OF MERIDIAN  
(NAS FACILITY / SEQUENTIAL BATCH REACTOR)**

**has been granted permission to discharge wastewater into**

**Sowashee Creek**

**in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof. This permit is issued in accordance with the provisions of the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402(b) of the Federal Water Pollution Control Act.**

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**

**ORIGINAL SIGNED BY:**

**BARRY S. ROYALS**

**AUTHORIZED SIGNATURE**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Issued: September 28, 1999**

**Permit No. MS0055735**

**Expires: September 27, 2004**

PART I

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning upon permit issuance, and lasting until September 27, 2004, the permittee is authorized to discharge from outfall serial number 001.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETER	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS		
	Monthly Average (lbs/day)	Maximum Weekly Average	Monthly Average	Maximum Weekly Average	Measurement Frequency	Sample Type	Sampling Point
Flow-MGD	--	--	1.0	--	Daily	Continuous	Effluent
Biochemical Oxygen Demand (5-day)	83	125	10 mg/l	15 mg/l	1 Day/Week	24-Hr Comp	Influent & Effluent
Suspended Solids	250	375	30 mg/l	45 mg/l	1 Day/Week	24-Hr Comp	Influent & Effluent
Ammonia Nitrogen	17	25	2 mg/l	3 mg/l	1 Day/Week	24-Hr Comp	Influent & Effluent
Fecal Coliform Bacteria, Geometric Mean (per 100 ml) (May - October)	--	--	200 Col	400 Col	1 Day/Week	Grab	Effluent
(November - April)	--	--	2000 Col	4000 Col	1 Day/Week	Grab	Effluent
Chlorine, Total Residual	--	--	0.015 mg/l	0.026 mg/l	Daily	Grab	Effluent

2. The effluent shall not cause an accumulation of solids or sewage sludges in the receiving stream.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. The effluent shall not cause a visible sheen on the receiving water.

**A. (Continued)**

5. The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units and shall be monitored **daily** with a grab sample of the effluent.
6. In addition to the specified limits, the monthly average effluent BOD (5-Day) and suspended solids concentration shall not exceed 15 percent of the respective monthly average influent concentrations.
7. The 30-minute settleability test for the aeration basin(s) shall be monitored **daily** and the monthly minimum and maximum values reported.
8. The aeration basin(s) dissolved oxygen shall be monitored **daily** and the monthly minimum and maximum values reported.
9. The dissolved oxygen shall not be less than 6.0 mg/l and shall be monitored 1 **day/week** with a grab sample of the effluent.
10. The toxicity of the effluent shall be monitored as described in Part III.C.
11. The ambient dissolved oxygen concentration of the receiving stream shall be monitored 1 **day/week at approximately 10:00 a.m.** at a point located approximately 1.6 rivermiles downstream of the discharge location in mid-channel and the minimum and maximum values reported on the Discharge Monitoring Report with an attached summary page of all values.

**B. SCHEDULE OF COMPLIANCE**

1. The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule:

Beginning the issuance date of this permit, the permittee shall achieve compliance with the effluent limitations specified on **Pages 2 and 3** of this permit.

2. No later than 10 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

**C. MONITORING AND REPORTING**

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous month shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) **POSTMARKED NO LATER THAN THE 28TH DAY OF THE MONTH FOLLOWING THE COMPLETED REPORTING PERIOD. THE FIRST REPORT IS DUE ON NOVEMBER 28, 1999.** Copies of these, and all other reports required herein, shall be signed in accordance with Sections 6 and 7 of the Mississippi Wastewater Permit Regulations, and shall be submitted to the Mississippi Environmental Quality Permit Board at the following address.

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**OFFICE OF POLLUTION CONTROL**

**P. O. Box 10385**

**Jackson, Mississippi 39289-0385**

3. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(h) of the Federal Water Pollution Control Act, as amended.

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- (a) The exact place, date, and time of sampling;
- (b) The dates the analyses were performed;
- (c) The person(s) who performed the analyses;
- (d) The analytical techniques or methods used; and
- (e) The results of all required analyses.

5. Records Retention

- (a) All records and information resulting from the monitoring activities required by this permit (including all records of; analyses performed; calibration and maintenance of instrumentation; and recording from continuous monitoring instrumentation) shall be retained for a minimum of three (3) years, or longer if requested by the Permit Board.

- (b) The permittee shall furnish to the Permit Board, upon request, copies of records required to be kept by this permit.

6. Definitions

- (a) The "monthly average" (applicable to municipal and domestic permits), other than for fecal coliform bacteria, is the arithmetic mean of all samples collected in a one-month period. The monthly average for fecal coliform bacteria is the geometric mean of all samples collected in a one-month period. In computing the geometric mean, one (1) shall be substituted for sample results of zero.
- (b) The "weekly average" (applicable to municipal permits), other than for fecal coliform bacteria, is the arithmetic mean of all the samples collected during a one-week period. The weekly average for fecal coliform bacteria is the geometric mean of all samples collected during a one-week period. In computing the geometric mean, one (1) shall be substituted for sample results of zero. For self-monitoring purposes the value to be reported is the single highest weekly average computed during a one-month period.
- (c) The "daily average" (applicable to industrial permits), other than for fecal coliform bacteria, is the arithmetic mean of all samples collected in a one-month period. The daily average for fecal coliform bacteria is the geometric mean of all samples collected in a one-month period. In computing the geometric mean, the value one (1) shall be substituted for sample results of zero.
- (d) The "daily maximum" (applicable to industrial and domestic permits), is the highest value recorded of any sample collected on any single day of the calendar month.

D. OTHER STANDARD CONDITIONS

1. Total Residual Chlorine Monitoring Conditions

The method of analysis for each sample shall be amperometric titration, DPD colorimetric, or specific ion electrode as specified in the test procedures for Analysis of Inorganic Pollutants, 40 CFR, Part 136, Table 1B.

For each sampling period, the limit of detection shall be no greater than 0.1 mg/l. If an analysis for a given sample results in a measurement of "less than the limit detection", then the reported value shall be reported as "none detected".

**PART II****A. MANAGEMENT REQUIREMENTS**

## 1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions or treatment modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application. If such changes will not violate the effluent limitations specified in this permit, and upon written notice (in lieu of a new NPDES application) to the Mississippi Environmental Quality Permit Board, the permit may be modified to specify and limit any pollutants not previously limited.

## 2. Duty to Comply 40 CFR 122.41(a)

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, renovation and reissuance, or modification; or for denial of a permit renewal application.

## 3. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any provision specified in this permit, the permittee shall notify the Mississippi Environmental Quality Permit Board orally within 24 hours of becoming aware of such conditions. A written report shall also be provided within five (5) days of such time and shall contain the following information:

- a. A description of the discharge and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

## 4. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

5. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

6. Bypassing

Any diversion from or bypass of wastewater collection and treatment facilities is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit.

The permittee shall notify the Mississippi Environmental Quality Permit Board orally of each such diversion or bypass within 24 hours of the diversion or bypass, or if the need for the bypass is known in advance, it shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

7. Upsets 40 CFR 122.41(n)

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
  - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated; and

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- (3) The permittee submitted notice of the upset as required in 40 CFR 122.41 (L)(6)(ii)(B) (24 hour notice of noncompliance).
  - (4) The permittee complied with any remedial measures required under 40 CFR 122.41 (d) (duty to mitigate).
  - d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
8. Removed Substances
- Solids, sludges, filter backwash, or other residuals removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent such materials from entering State waters and in a manner consistent with the Mississippi Solid Waste Disposal Act and the Federal Resource Conservation and Recovery Act.
9. Power Failures
- In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:
- a. In accordance with the Schedule of Compliance contained in Part I, provide an alternate power source sufficient to operate the wastewater collection and treatment facilities, or, if such alternate power source is not in existence, and no date for its implementation appears in Part I;
  - b. Provide a method whereby the effluent limitations contained in Part I shall be met upon the reduction, loss, or failure of the primary source of power to the wastewater collection and treatment facilities.

**B. RESPONSIBILITIES**

1. Right of Entry

The permittee shall allow the Mississippi Environmental Quality Permit Board and the Regional Administrator of the U. S. Environmental Protection Agency and/or their authorized representatives, upon the presentation of credentials.

- a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and

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- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

2. Transfer of Ownership or Control

This permit is not transferable to any person except after proper notice and approval by the Permit Board. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the Mississippi Environmental Quality Permit Board at least thirty (30) days in advance of the proposed transfer date. The notice should include a written agreement between the existing and new permittees containing a specific date for the transfer of permit responsibility, coverage, and liability.

3. Signatory Requirements 40 CFR 122.41(k)

All applications, reports, or information submitted to the Permit Board shall be signed and certified.

- a. All permit applications shall be signed as follows:

- (1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (1) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making function for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding 25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, representatively; or

- (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

- b. All reports required by the permit and other information requested by the Permit Board shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described above;

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- (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
- (3) The written authorization is submitted to the Permit Board.
- c. Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Permit Board prior to or together with any reports, information, or applications.
- d. Certification. Any person signing a document under paragraphs (a) or (b) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**4. Availability of Records**

Except for data determined to be confidential under the Mississippi Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of the Mississippi Department of Environmental Quality Office of Pollution Control.

5. Permit Modification

- a. The permittee shall furnish to the Permit Board within a reasonable time any relevant information which the Permit Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.
- b. Upon sufficient cause this permit may be modified, revoked, reissued, or terminated during its term.
- c. The filing of a request by the permittee for a permit modification, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

The permittee shall comply with any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) established under Section 307(a) of the Federal Water Pollution Control Act.

7. Toxic Pollutants Notification Requirements

The permittee shall comply with the applicable provisions of 40 CFR 122.42.

8. Civil and Criminal Liability

- a. Any person who violates a term, condition or schedule of compliance contained within this permit or the Mississippi Water Pollution Control Law is subject to the actions defined by law.
- b. Except as provided in permit conditions on "Bypassing" and "Upsets" (Part II, A-6 and 7), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.
- c. It shall not be the defense of the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**9. Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Federal Water Pollution Control Act and applicable provisions of the Mississippi Water Pollution Control Law pertaining to spills of oil and hazardous materials.

**10. Property Rights**

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

**11. Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstance, and the remainder of this permit, shall not be affected thereby.

**12. Expiration of Permit**

The permittee shall not discharge after the expiration date of this permit unless he has submitted a completed application for reissuance no later than 180 days prior to the expiration date. The Head of the Office of Pollution Control may grant permission to submit an application later than this, but no later than the expiration date of the permit.

**13. Certified Operator**

The permittee shall provide written notification to the Mississippi Commission on Environmental Quality no later than thirty (30) days after the loss of the permittee's certified operator.

**PART III****A. REOPENER CLAUSE**

This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation or stormwater regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation or regulation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

**B. CLOSURE REQUIREMENTS**

Should the permittee decide to permanently close and abandon the premises upon which it operates, it shall so notify the Permit Board no later than 90 days prior to doing so. Accompanying this notification shall be a closure plan which describes how and when all manufactured products, by-products, raw materials, stored chemicals, and solid and liquid waste will be removed from the premises such that they will present no potential environmental hazard to the area. Abandonment of the site without providing proper notification as required herein, or without completing all aspects of the closure plan, will constitute a violation of this permit and may result in penalties of up to \$25,000.

**C. CHRONIC WHOLE EFFLUENT TOXICITY MONITORING REQUIREMENTS**

The Water Quality Standards of Mississippi require that all waters be free from substances in concentrations or combinations which are harmful to humans, animals, or aquatic life (State of Mississippi, Water Quality Criteria for Intrastate and Coastal Waters, Section II.4., Minimum Conditions Applicable to All Waters, page 3, adopted March 22, 1990). In accordance with such requirements, the permittee is authorized to discharge from outfall(s) 001 only in accordance with the following conditions:

1. The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.

2. The permittee shall perform 7-day chronic, static renewal, definitive (a control and five effluent concentrations) WET tests in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/600/4-91/002) or Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028) or the most recent edition'.
  - a. Dilution water used for these tests shall consist of reagent grade water, defined as distilled or deionized water that does not contain substances which are toxic to the test organisms. For freshwater tests, dilution water shall consist of reagent grade chemicals or mineral water combined to make moderately hard dilution water according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/600/4-89/001) or most recent edition'. For estuarine testing, dilution water shall consist of synthetic seawater or hypersaline brine combined to achieve a salinity of 20 parts per thousand according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms (EPA/600/4-87/028) or most recent edition'. These dilution waters will be deemed acceptable if the control organisms in the toxicity tests meet the minimum EPA criteria for chronic tests.
  - b. If the Mississippi Office of Pollution Control determines the receiving waters are freshwater, the permittee shall conduct a Ceriodaphnia dubia Survival and Reproduction Test, and a Pimephales promelas Larval Survival and Growth Test on serial dilutions of effluent to determine if the discharge from outfall(s) 001 is chronically toxic. Such testing will determine if the water affects the survival, growth, and reproduction of the test organisms. Static renewal tests will be conducted on three 24-hour composite samples of effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/600/4-91/003), or the most recent edition', are met. All data shall be statistically analyzed according to the referenced manual.

- c. If the Mississippi Office of Pollution Control determines that the receiving water is estuarine, the permittee shall conduct a Menidia beryllina Larval Survival and Growth Test and a Mysidopsis bahia Survival, Growth, and Fecundity Test on serial dilutions of effluent to determine if the discharge from outfall(s) 001 is chronically toxic. Such testing will determine if the water affects the survival, growth, and fecundity of the test organisms. Static renewal tests will be conducted on three 24-hour composite samples of effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028) or most recent edition\* are met. All test data shall be statistically analyzed according to the referenced manual.
- d. A standard reference toxicant quality assurance test (chronic) shall be conducted concurrently with the effluent tests using both species used in the toxicity tests. Alternatively, if a lab conducts **monthly** QA/QC reference toxicant tests with both species as part of their SOP, these results may be submitted in lieu of the above mentioned concurrent tests results. In either case, the reference toxicant test results must be submitted with the final report as well as on the Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form within two weeks of test completion. Final chronic toxicity test results shall be in report form as outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027F) or most recent edition\*.
3. These chronic toxicity tests shall be initiated within 90 days of the date of issuance of the permit to evaluate wastewater toxicity. Such chronic toxicity tests shall be conducted once per quarter for a period of one year following the effective date of the permit. After the first year of testing, the frequency of monitoring may be reduced to once per six months for the life of the permit. Sampling shall be timed to cover the seasonal extremes of the year (hot-dry and cold-wet).

In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.7 and 40 CFR 122.61 (06-03-93).

\*Contact the Mississippi Office of Pollution Control Laboratory for information on most recent edition(s) of methods manual.

## PART IV

## A. SLUDGE MANAGEMENT REQUIREMENTS

1. General Compliance: The permittee shall comply with all existing Federal and State laws and regulations that apply to its sewage sludge use and disposal practice(s), with the Mississippi Nonhazardous Waste Management Regulations and with the CWA Section 405 (d) technical standards when promulgated.
2. Reopener: If an applicable "acceptable management practice" or numerical limitation for pollutants in sewage sludge promulgated under Section 405(d)(2) of the Clean Water Act, as amended by the Water Quality Act of 1987, is more stringent than the sludge pollutant limit or acceptable management practice in this permit, or controls a pollutant not limited in this permit, this permit shall be promptly modified or revoked and reissued to conform to the requirements promulgated under Section 405(d)(2). The permittee shall comply with the limitations by no later than the compliance deadline specified in the applicable regulations as required by Section 405(d)(2)(D) of the Clean Water Act.
3. Notice of Change in Sludge Disposal Practice: The permittee shall give prior notice to the Director of any change(s) planned in the permittee's sludge use or disposal practice.
4. Cause for Modification: 40 CFR 122.62(a)(1) provides that the following is a cause for modification but not revocation and reissuance of permits except when the permittee requests or agrees.

Alterations: There are material and substantial changes or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

**PART V**

**A. PRETREATMENT REQUIREMENTS**

1. This permit shall be modified, or alternately revoked and reissued by a date to be determined to incorporate an approved municipal pretreatment program as required under Section 402(b)(8) of the Federal Water Pollution Control Act and implementing regulations or by the requirements of the approved State pretreatment program, as appropriate.
2. Effluent limitations from this discharge are listed in Part I of this permit. If it becomes apparent that other pollutants attributable to inputs from major contributing industries using the municipal system are also present in the permittee's discharge, this permit may be revised to specify effluent limitations for any or all of such other pollutants in accordance with best practicable technology or water quality standards.
3. Under no circumstances shall the permittee allow introduction of the following wastes or pollutants into the waste treatment system.
  - a. Pollutants which create a fire or explosion hazard in the treatment works;
  - b. Pollutants which will cause corrosive structural damage to treatment works; but in no case discharges with a pH designed lower than 5.0, unless the works are specifically designed to accommodate such discharges;
  - c. Solids or viscous substances in amounts which cause obstructions to the flow in sewer or interference with the proper operation of the treatment works;
  - d. Wastewaters at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so as to cause a loss of treatment efficiency;
  - e. Heat in amounts which will inhibit biological activity in the treatment works resulting in interference, but in no case heat in such quantities that the temperature of the influent exceeds 40 degrees Celsius (104 degrees Fahrenheit), unless approval for alternate limits has been granted by the Permit Board.

**Mendez, Gayla**

36

**From:** Davis, Molly  
**Sent:** Thursday, May 14, 2015 10:50 AM  
**To:** Hesterlee, Craig; Seiwert, Carla  
**Subject:** FW: Fw: notes from conference call on MDEQ's permits

Are you all good with the response from Brad?

-----Original Message-----

**From:** Bradley\_Crain@deq.state.ms.us [mailto:Bradley\_Crain@deq.state.ms.us]  
**Sent:** Thursday, May 14, 2015 9:13 AM  
**To:** Davis, Molly  
**Cc:** Hesterlee, Craig; Seiwert, Carla  
**Subject:** Re: Fw: notes from conference call on MDEQ's permits

Ms. Davis,

The following is our response to your comments.

General comment applicable to all permits: the Fact Sheets in all the permits need to include more background information on how permitting decisions were made especially when there is a TMDL and/or impairment for the receiving water, and how reasonable potential was evaluated.

For clarification, the fact sheet that we complete is a submittal that we send only to EPA that contains basic permit and permitting process information. The permit rationale is the document we complete to detail the basis of the permit limitations, condition of the receiving stream, and type of treatment utilized. The permit rationale is the document that is distributed during the public notice period, and not the fact sheet.

Meridian POTW:

1. We understand the permit is written such that all the effluent goes to Sowatchee Creek and not to the power plant that is not ready to receive the effluent for cooling water. This needs to be explained better in the Fact Sheet

The following statement will be added to the permit rational, "The permit is written to reflect a continual daily discharge of Meridian POTW's treated effluent into Sowashee Creek. The permit does not detail any limitations or monitoring for the instance where the effluent is routed to the Mississippi Power Kemper County Facility."

2. Permit needs to demonstrate that effluent limits are meeting the TMDL and this is not clear from the Fact Sheet

The permit rational does state that the effluent limitations comply with load allocations given in the Sowashee Creek TMDL.

#### **Hattiesburg Lagoon:**

1. MDEQ agreed to increase the fecal coliform monitoring to monthly rather than twice a season. This should not create an added expense for the facility as they are reporting monthly fecal coliform concentrations on the DMRs they submit.

We have adjusted the fecal coliform monitoring frequency in the permit from "twice per season" to "monthly".

2. We acknowledge that there is a long-term solution to the problems with the lagoon as the City of Hattisburg plans to construct a new WWTP.

Comment noted.

#### **Oxford POTW:**

1. MDEQ agreed to update the fact sheet to explain mercury impairment and how the TMDL proposes to implement the reductions in permits. We acknowledge that the TMDL doesn't require monitoring for mercury.

We will include this statement in the permit rationale, "Oxford POTW does appear in a Mercury TMDL for the Yocona River. The TMDL requires that point sources that discharge over 0.05 MGD to perform Mercury monitoring utilizing clean techniques and accurate testing methods. Oxford performs the required mercury monitoring before each reissuance of the permit that meets the requirement of the TMDL. The long term average for mercury in this application was 3 ppt. This level does not demonstrate a reasonable potential to contribute to significant mercury accumulation in the stream nor violate any chronic, acute, or human health criteria. "

2. Permit should require monitoring and an allocation to TN and TP.

The permit contains TN and TP monitoring. The current permit requires 5 days/week monitoring of TN and TP. This frequency was also required in the previous permit. This frequency seems excessive, and is greater than other major facilities requiring monitoring only of nutrients. It is our intention to reduce the monitoring frequency to monthly before sending the permit to public notice. The permit is not listed as a point source in any Nutrient TMDL that allocates a nutrient load to limit in the permit, so no limitations were included in the permit for TN and TP.

**Laurel #1 and #2:**

1. MDEQ acknowledged that monitoring for TN and TP was left out of the pre-draft they sent EPA. They agreed to add these requirements to the draft permit before it goes to public notice.

We will revise both permits to contain monthly TN and TP monitoring before the permits are sent to public notice.

2. Facility has seasonal limits for NH<sub>3</sub> (summer) and just Monitoring and reporting for winter. This is not explained in the Fact Sheet nor was a reasonable potential analysis completed to support the lack of winter limits.

The permit rationale states that the permit limitations derived from the wasteload allocation comply with the conditions of the Tallahalla Creek TMDL. The TMDL required the reductions during the seasonal critical conditions of May through October. It did not require limitations during the non-critical periods.

3. Permit app says UV disinfection but contains total residual chlorine limits. No explanation given in the Fact Sheet.

The following statement will be added to the permit rational, "Chlorine limitations were added to the permit to allow the facility to utilize chlorine disinfection in a manner that protects water quality from chlorine toxicity in the event of disruption of UV system."

**Tupelo POTW:**

1. Permit rationale needs current discussion of water quality status of receiving water (Towns Creek). TMDL ambient target was about 0.1 mg/l. If Towns Creek is still not meeting water quality standards for phosphorus, TMDL should be re-evaluated to make sure that the primary point source is not over-allocated.

The permit rational states that the limitations required by the Town Creek TMDL are included in the permit. The rational states the permit is required to meet a TN limit of 1191.8 lbs/day, and a TP limit of 153.7 lbs/day. These limitations must be complied with upon the issuance of the permit. Mississippi DEQ has not obtained any new data in Town Creek during the last five years to reevaluate the TMDL. Once Mississippi DEQ has scheduled the reevaluation of Town Creek, and if that reevaluation demonstrates the TMDL needs to be modified, and EPA has approved the modified TMDL, then the permit and permit rational will be written to comply with the current approved TMDL.

2. Towns Creek is impaired for pH. Permit rationale should discuss how RP was conducted to ensure that effluent does not contribute to impairment.

This TMDL does not require any limitation or monitoring from this point source. Additionally, the permit does require the water quality criteria range of 6.0-9.0. The permit rational will be modified to include the following statement, "As permitted, the discharge from this facility will comply with the conditions of the pH TMLD for Town Creek".

3. TMDLs completed for pesticides and sediment/biota. Permit rationale should verify that facility is excluded as a source.

This TMDL does not require any limitation or monitoring from this point source. The permit rational will be modified to include the following statement, "As permitted, the discharge from this facility will comply with the conditions of the pesticide/sediment TMDLs for Town Creek".

4. Permit rationale should contain brief discussion regarding what changed from previous permit. In this case, the nutrient limits are new, right?

The nutrient limits were phased in the previous permit. They became effective on the last day of the previous permit, so there were no changes from the previous permit. We will include the following statement to the permit rational in the Summary of Limitations section, "No changes in limitations from the previous permit."

Thank you for your comments, and if you have any questions please call me.

Sincerely,  
Bradley Crain, P.E., BCEE  
Municipal & Private Facilities Branch  
Environmental Permit Division  
(601) 961-5177

Harry,  
I don't have email addresses from everyone who was on the call yesterday, so if you could forward these comments I would appreciate it. If I misstated anything, please let me know. Thank you for taking the time to discuss the concerns we have when reviewing the POTW permits for the cities of Meridian, Hattisburg, Oxford and Laurel. As a follow-up to our conversation yesterday, I agreed to send you comments Craig Hesterlee has on the Laurel permits and they are included in the email. In addition, please see Craig's comments regarding the Tupelo POTW. I am also summarizing in this email our comments on the above POTW permits and what

we agreed to on the call. Molly

General comment applicable to all permits: the Fact Sheets in all the permits need to include more background information on how permitting decisions were made especially when there is a TMDL and/or impairment for the receiving water, and how reasonable potential was evaluated.

**Meridian POTW:**

1. We understand the permit is written such that all the effluent goes to Sowatchee Creek and not to the power plant that is not ready to receive the effluent for cooling water. This needs to be explained better in the Fact Sheet
2. Permit needs to demonstrate that effluent limits are meeting the TMDL and this is not clear from the Fact Sheet

**Hattisburg Lagoon:**

1. MDEQ agreed to increase the fecal coliform monitoring to monthly rather than twice a season. This should not create an added expense for the facility as they are reporting monthly fecal coliform concentrations on the DMRs they submit.
2. We acknowledge that there is a long-term solution to the problems with the lagoon as the City of Hattisburg plans to construct a new WWTP.

**Oxford POTW:**

1. MDEQ agreed to update the fact sheet to explain mercury impairment and how the TMDL proposes to implement the reductions in permits. We acknowledge that the TMDL doesn't require monitoring for mercury.
2. Permit should require monitoring and an allocation to TN and TP.

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Permit rationale should contain brief discussion regarding what changed from previous permit. In this case, the nutrient limits are new, right?

Molly Davis  
Chief, NPDES Permitting Section  
US EPA Region 4  
61 Forsyth St SW  
Atlanta, GA 30303  
404-562-9236 (wk)  
404-562-9772 (fax)

## Mendez, Gayla

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**From:** Davis, Molly  
**Sent:** Wednesday, April 29, 2015 3:51 PM  
**To:** Harry\_Wilson@deq.state.ms.us  
**Cc:** Hesterlee, Craig; Seiwert, Carla  
**Subject:** notes from conference call on MDEQ's permits

**Categories:** \_MS POTW

Harry,

I don't have email addresses from everyone who was on the call yesterday, so if you could forward these comments I would appreciate it. If I misstated anything, please let me know. Thank you for taking the time to discuss the concerns we have when reviewing the POTW permits for the cities of Meridian, Hattisburg, Oxford and Laurel. As a follow-up to our conversation yesterday, I agreed to send you comments Craig Hesterlee has on the Laurel permits and they are included in the email. In addition, please see Craig's comments regarding the Tupelo POTW. I am also summarizing in this email our comments on the above POTW permits and what we agreed to on the call. Molly

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Molly Davis  
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US EPA Region 4  
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Atlanta, GA 30303  
404-562-9236 (wk)  
404-562-9772 (fax)

**Mendez, Gayla**

37

**From:** Chris\_Messemore@deq.state.ms.us  
**Sent:** Thursday, April 23, 2015 4:56 PM  
**To:** Seiwert, Carla  
**Subject:** Re: Fwd: Questions re: Hattiesburg, Meridian, and Oxford POTWs  
**Categories:** \_MS POTW

Carla,

We have currently a call setup for 9.30 (CST) on Tuesday (4/28). Let me know if you need anything.

Thanks,  
Christopher Messemore, P.E., BCEE  
Municipal and Private Facilities Branch  
Environmental Permits Division  
Mississippi Department of Environmental Quality  
PO BOX 2261  
Jackson, Ms 39225  
(601) 961-5647  
(601) 961-5703 (fax)  
[www.deq.state.ms.us](http://www.deq.state.ms.us)

**From:** Bradley Crain/EPD/OPC/DEQ  
**To:** "Chris Messemore/EPD/OPC/DEQ" <Chris\_Messemore@deq.state.ms.us>,  
**Date:** 04/21/2015 02:22 PM  
**Subject:** Fwd: Questions re: Hattiesburg, Meridian, and Oxford POTWs

Let's get this set up.

Begin forwarded message:

**From:** "Seiwert, Carla" <Seiwert.Carla@epa.gov>  
**Date:** April 21, 2015 at 9:33:19 AM CDT  
**To:** "Bradley Crain@deq.state.ms.us" <Bradley\_Crain@deq.state.ms.us>  
**Cc:** "Davis, Molly" <Davis.Molly@epa.gov>, "Hesterlee, Craig" <Hesterlee.Craig@epa.gov>  
**Subject:** Questions re: Hattiesburg, Meridian, and Oxford POTWs

Bradley,

I am reviewing many of the Mississippi POTW permits that are currently public noticed: Hattiesburg South Lagoon (MS0020303), Meridian POTW (MS0020117), and Oxford POTW (MS0029017). I have a few questions regarding these permits and was hoping to set up a call with you, my supervisor Molly Davis and Craig Hesterlee.

Would you be free sometime Monday for a call?

Thank you,

**Mendez, Gayla**

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**From:** Seiwert, Carla  
**Sent:** Friday, April 24, 2015 1:32 PM  
**To:** 'Chris\_Messemore@deq.state.ms.us'  
**Subject:** RE: Fwd: Questions re: Hattiesburg, Meridian, and Oxford POTWs

Hi Chris,

Did you have any luck seeing if this could be changed to Wednesday?

Thanks,

Carla

**From:** Chris\_Messemore@deq.state.ms.us [mailto:Chris\_Messemore@deq.state.ms.us]  
**Sent:** Thursday, April 23, 2015 4:56 PM  
**To:** Seiwert, Carla  
**Subject:** Re: Fwd: Questions re: Hattiesburg, Meridian, and Oxford POTWs

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We have currently a call setup for 9.30 (CST) on Tuesday (4/28). Let me know if you need anything.

Thanks,  
Christopher Messemore, P.E., BCEE  
Municipal and Private Facilities Branch  
Environmental Permits Division  
Mississippi Department of Environmental Quality  
PO BOX 2261  
Jackson, Ms 39225  
(601) 961-5647  
(601) 961-5703 (fax)  
[www.deq.state.ms.us](http://www.deq.state.ms.us)

**From:** Bradley Crain/EPD/OPC/DEQ  
**To:** "Chris Messemore/EPD/OPC/DEQ" <Chris\_Messemore@deq.state.ms.us>  
**Date:** 04/21/2015 02:22 PM  
**Subject:** Fwd: Questions re: Hattiesburg, Meridian, and Oxford POTWs

---

Let's get this set up.

Begin forwarded message:

**From:** "Seiwert, Carla" <Seiwert.Carla@epa.gov>  
**Date:** April 21, 2015 at 9:33:19 AM CDT  
**To:** "Bradley Crain@deq.state.ms.us" <Bradley\_Crain@deq.state.ms.us>  
**Cc:** "Davis, Molly" <Davis.Molly@epa.gov>, "Hesterlee, Craig" <Hesterlee.Craig@epa.gov>

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Would you be free sometime Monday for a call?

Thank you,

Carla Seiwert

Carla Seiwert  
Life Scientist, NPDES Permitting  
U.S. Environmental Protection Agency, Region IV  
61 Forsyth Street, SW  
Atlanta, Georgia 30303  
404-562-9299